Before the Fast-track Panel

Under: Fast-track Approvals Act 2024

In the matter of: FTAA-2603-1178 – Alternative to the Brynderwyn Hills Project (Brynderwyn Hills section)

Statement of advice: Leah McEnhill

Planning Assessment

DOC Staff

20 October 2026

Department of Conservation
Te Papa Atawhai

Te Kāwanatanga o Aotearoa
New Zealand Government

Introduction

1. My full name is Leah Fyson McEnhill.

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2. I have been requested to provide expert advice to the Director-General of Conservation (DOC/the Department) for the purposes of his comments on the Alternative to the Brynderwyn Hills Project Fast-track application.

Qualification and Experience

3. I am a Resource Management Planner at the Department of Conservation, based in Ōtautahi Christchurch. I have been employed in this role since December 2024.

4. I have a Master of Planning (First Class Honours) and a Bachelor of Environment and Society from Lincoln University. Prior to working at the DOC, I worked for over 3 years as a Resource Consent Planner at Environment Canterbury Regional Council.

5. In my role as a Resource Management Planner, I provide planning advice on written approval requests, pre-application consultation requests, limited and publicly notified resource consent applications, proposed district and regional plans and plan changes, and applications prepared under the Fast-track Approvals Act 2024 (FTAA).

6. My previous role at Environment Canterbury Regional Council involved providing pre-application advice and assessing and making recommendations on resource consent applications.

7. I have experience providing planning advice on consent applications for large infrastructure, housing and industrial developments, involving activities such as earthworks, vegetation clearance, wetland reclamation, river realignment, the discharge of contaminants to land and water, and ecological restoration works. These have required assessments of environmental effects under the

Resource Management Act 1991 (RMA) and national and regional policy statements, the FTAA and the Natural and Built Environment Act 2023 (NBEA).

Code of conduct

8. Whilst it is acknowledged this is not an Environment Court Proceeding, I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court Practice Note 2023. I have complied with the Code of Conduct in the preparation of this advice. Unless I state otherwise, this advice is within my area of expertise, and I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.

Scope of advice and expert opinion

9. My expert advice relates to the following:

    i. Adequacy of the Applicant's assessment of the relevant planning provisions relating to freshwater, avifauna, and terrestrial ecology.

    ii. Comments on conditions.

Material Considered

10. In preparing this advice I have reviewed the following documents as part of the substantive application:

    a) Volume A – FTAA Substantive Application – Main Application.

    b) Volume B – RMA Approvals.

    c) Volume B – Appendix D06 – Assessment of Effects on Terrestrial Ecology.

    d) Volume B – Appendix D07 – Assessment of Effects on Freshwater Ecology.

    e) Volume B – Appendix D08 – Assessment of Effects on Avifauna Ecology.

    f) Designation conditions – 13 July 2026.

    g) Designation conditions – Appendix A – Avoid Areas – 13 July 2026.

h) Designation conditions – Appendix C – Existing Indigenous Vegetation – 13 July 2026.

i) Designation conditions – Appendix D – Avoid Areas except for Ecological Works – 13 July 2026.

j) Designation conditions – Appendix X – Brynderwyn Bus Crash Site Avoid Area – 13 July 2026.

k) (Regional) Resource consent conditions – 13 July 2026.

l) (Regional) Resource consent conditions – Appendix A – Existing Wetlands – 13 July 2026.

m) (Regional) Resource consent conditions – Appendix B – Watercourses – 13 July 2026.

n) Draft Ecological Management Plan – 13 July 2026.

o) Statements of advice prepared on behalf of the Department by Dr Jamie Stavert (invertebrate effects assessment) and Dr Rhys Burns (frog and herpetofauna effects assessment) as part of the Department's report prepared in accordance with section 51 of the FTAA.

p) Statements of advice, and addendums to these, prepared on behalf of the Department of Conservation by Dr Tim Martin (terrestrial and freshwater vegetation effects assessments), Dr Amber McEwan (freshwater effects assessment), Ms Tertia Thurley (bat effects assessment), Dr Rhys Burns (avifauna, frog, and herpetofauna effects assessment), Dr Richard Storey (freshwater offsetting), Mr Nick Goldwater (terrestrial, wetland and fauna offsetting), and Dr Jamie Stavert (terrestrial invertebrates) as part of the Department's comments prepared in accordance with s53 of the FTAA.

q) Brynderwyn Hills Alternative Project – Indicative Compensation Approach - 7 October 2026 (and subsequent email from NZTA of 8 October 2026 with frog compensation calculation).

r) Proposed Amendments to Mitigation Package Since Lodgement – 9 October 2026.

Executive Summary

11. The substantive application identifies the statutory provisions relevant to an assessment of the Project. I generally agree with the Applicant's identification of planning provisions of relevance to the proposal but do not agree with some of the conclusions reached by the Applicant regarding whether the proposal is consistent with specific provisions. I also note that both mine and the Applicant's conclusions are informed by the assessments of values identified on site, and the anticipated effects on these values pre and post mitigation. As is detailed in the technical reports of Dr Martin, Dr McEwan, Dr Storey, Mr Goldwater, Ms Thurley, Dr Stavert and Dr Burns, there are currently areas of disagreement between the Applicant's technical experts and the Department's technical experts, as well as areas of uncertainty due to limited information.

12. My assessment addresses key planning provisions where I either disagree with the Applicant's assessment, consider further information is required, or note that the views of the Department's technical experts that differ from the Applicant's would likely result in a different conclusion regarding the relevance of a provision or the consistency of the proposal with a provision. I acknowledge that there are numerous provisions within the relevant plans that direct the construction and operation of infrastructure, particularly significant or specified infrastructure, to be enabled and provided for. Where I generally agree with the Applicant's assessment and conclusions, I have not provided specific comment on these.

Relevant Planning Provisions

13. The conclusions around the values present on site, the likely levels of effects on these values, and the adequacy of mitigation have the potential to significantly impact whether the proposal aligns with relevant planning provisions. The following planning analysis does not determine which expert

opinions are to be adopted, but does aim to identify where the Department's technical experts' views would potentially impact the degree to which the project is consistent with specific planning provisions.

14. My analysis is based on the proposal as updated by the Indicative Compensation Approach and the Proposed Amendments to the Mitigation Package Since Lodgement (Amended Mitigation Package). However, it is noted that no updated assessment of effects or planning analysis have been provided in relation to these changes, updated consent conditions are yet to be provided, and in some instances, there is insufficient information available to comprehensively understand and assess the proposed amendments.

National Policy Statement for Infrastructure 2025 (NPS-I)

15. The Applicant has concluded that the NPS-I broadly applies to all infrastructure activities and supporting activities and therefore applies directly to all elements of the project. I agree with this conclusion and generally agree with the Applicant that the proposal is consistent with the relevant provisions in the NPS-I. However, I consider that Policy 9 requires further consideration.

16. Policy 9 (Managing the effects of new infrastructure and major upgrades) states:

    1) Decision-makers must enable new infrastructure or major upgrades of existing infrastructure activities in all environments.

    2) Where infrastructure activities are proposed to locate in or are likely to have adverse effects on environments and values provided for in section 6 of the Act, the provisions of this policy must be read alongside other relevant national direction, regional policy statements and regional and district plans.

    3) Where (2) does not apply, the adverse effects of new infrastructure and major upgrades must be, where practicable, avoided, remedied or mitigated.

17. Environments and values provided for in section 6 of the Resource Management Act 1991 (RMA) include:

    - the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins.
    - areas of significant indigenous vegetation and significant habitats of indigenous fauna.
    - the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.

18. This means that under the NPS-I, while new infrastructure must be enabled in all environments, activities located in, or likely to have adverse effects on, significant indigenous vegetation and habitats, the natural character of wetlands and rivers and their margins, and Māori cultural and traditional relationships are still subject to the usual statutory framework in addition to the provisions in Policy 9 of the NPS-I.

19. In relation to significant indigenous vegetation and significant habitats of indigenous fauna, the Applicant does not appear to have assessed or identified specific areas within the site that would meet this definition and subsequently has not assessed whether there will be any adverse effects on them. Dr Martin has advised that sufficient information has not been provided to enable an independent assessment of significance across the whole site. Nevertheless, using the information available, he has been able to assess ten vegetation types within the site using the significance criteria in the Regional Policy Statement for Northland (RPSN). Dr Martin has concluded that all ten vegetation types would meet the significance criteria, as would all seven of the natural areas he noted as having been previously identified in the Protected Natural Area Programme. For the remaining areas of the site, a significance assessment is still required.

20. Given the above, I consider there will be adverse effects on significant indigenous vegetation and significant habitats of indigenous fauna, though the

full extent of effects is currently unclear. Policy 9 of the NPS-I must therefore be read alongside other relevant planning provisions relating to significant indigenous vegetation and significant habitats of indigenous fauna.

21. The Applicant has identified that the proposal will have adverse effects on wetlands and streams, triggering the need for Policy 9 of the NPS-I to be read alongside other relevant planning provisions. I note that Dr Martin is of the view that the Freshwater Ecology Assessment (FWEA) has not adequately identified all wetlands and/or wetland extent within the Proposed Designation and has also underestimated their values in some instances. Therefore, the extent of adverse effects on wetlands has likely been underreported. To adequately assess adverse effects and meet the requirements of this policy, the Applicant first needs to identify all wetlands within the site that may be affected by the proposal and to adequately assess their extent and values.

22. In their Amended Mitigation Package, the Applicant has proposed a requirement for a pre-construction survey to identify the extent and value of wetlands impacted by the Project. However, without further information about what the surveys will entail and how values will be assigned, it is uncertain whether wetland extent and values will be adequately identified during future surveys. This is particularly the case if the Panel accepts Dr Martin's advice regarding the gaps and inadequacies in the existing wetland assessment, detailed further below.

23. It is my view that Policy 9 of the NPS-I clearly directs that whilst the NPS-I enables the development of new infrastructure in all environments, activities that result in adverse effects on environments and values provided for in section 6 of the RMA must also be read alongside planning provisions including the following:

    a) NPS-FM Policy 6: There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted.

    b) NPS-FM Policy 7: The loss of river extent and values is avoided to the extent practicable.

c) NPS-IB Policy 8: The importance of maintaining indigenous biodiversity outside SNAs is recognised and provided for.

24. As detailed further below, I consider the proposal to be inconsistent, or likely to be inconsistent, with several policies relating to wetlands, rivers, significant indigenous vegetation or significant habitats of indigenous fauna. I also note that in numerous instances the Department's technical experts have identified opportunities within the Proposed Designation to mitigate or offset adverse effects on these environments and values that would be more in line with these policies. I therefore consider that the Applicant has not adequately considered all practicable options to manage effects on environments and values identified in section 6 of the RMA and is therefore inconsistent with Policy 9 of the NPS-I.

National Policy Statement for Freshwater Management 2020

25. The Applicant has assessed the proposal against the NPS-FM and concluded that overall, the project is consistent with the relevant provisions when read alongside the relevant policies of the NPS-I. In stating that the proposal is consistent with planning provisions when read alongside the NPS-I, the Applicant appears to indicate that the provisions in the NPS-I enable the watering down or weakening of other planning provisions including those in the NPS-FM and the NPS-IB. I agree that both policy statements are of relevance to the proposal, however I note that the NPS-FM and NPS-IB do not contain requirements for any of their policies to be read alongside the NPS-I. It is only Policy 9 of the NPS-I that specifically includes a requirement to read the provisions of that specific policy alongside other relevant planning provisions. I am therefore of the opinion that it is appropriate to consider the proposal's alignment with the NPS-FM, and with other planning provisions, independently.

26. While the Panel will be required to conduct an overall weighting exercise, they will first need to understand each of the individual factors and impacts that are to be considered.

27. I consider that there is currently insufficient information to complete a full assessment of the proposal's consistency with all of the relevant provisions in the NPS-FM. I also consider the degree of consistency is dependent on the anticipated ecological values and effects, which the technical experts do not entirely agree on at present. As detailed further below, based on the information currently available I am of the view that the proposal is not consistent with some of the relevant provisions in the NPS-FM.

NPS-FM Policy 6

28. Policy 6 of the NPS-FM directs that there is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted. The Applicant has concluded that the proposal is partially consistent with this provision as wetlands will be avoided where possible, and offsetting will be undertaken for residual adverse effects on wetlands with the highest ecological value impacted by the Indicative Alignment, though no offsetting is proposed for the natural inland wetlands within the Proposed Designation that are exotic, pasture wetlands, or induced by grazing and land management due to their low values.

29. Dr Martin is of the view that the Applicant has not undertaken an adequate assessment of wetlands present within the Proposed Designation, either understating their values or not identifying them at all. For example, based on desktop review and a one-day site visit, Dr Martin identified an additional 15 confirmed or likely natural inland wetlands within the designation, including eight that had been identified by the Northland Regional Council as indicative wetlands, and all of which were visible using Google Earth and or Retrolens imagery. He therefore considers that the total area of wetland habitat is likely to be even greater.

30. Likewise, Dr McEwan considers that the Applicant has not assessed aquatic fauna in wetlands and has undertaken limited and unorthodox assessments of habitats and aquatic fauna present in streams which has likely resulted in the underreporting of values within the Proposed Designation. Furthermore,

Dr Martin has advised that any wetland that supports black mudfish would have "Moderate" to "High" ecological value. It is therefore possible that this approach has also led to further underreporting of wetland values within the site.

31. Dr Martin is also of the view that the adverse effects on wetland ecology have likely been underestimated, and the measures required to manage these effects have therefore likely also been underestimated. For example, Dr Martin considers the indigenous wetland species persisting in Wetlands 12 and 13 would likely result in at least part of these wetlands being assessed as of "Moderate" ecological value or higher, as opposed to the "Low" ecological value assessed by the FWEA. Dr Martin has subsequently concluded that the Applicant's current approach to wetland management will result in adverse effects that are more than minor for a suite of wetlands other than Wetland 24, without any proposed measures to manage these effects.

32. I acknowledge that as part of the Amended Mitigation Package, the Applicant is now proposing to "mitigate" for both "Moderate" and "High" value wetlands, either through restoration of existing wetlands or the creation of new wetlands. I consider that the proposed management of effects through the restoration or creation of wetlands is more appropriately described as offsetting under the NPS-FM.

33. As further surveying is only proposed at the pre-construction phase, and noting Dr Martin's concerns regarding the identification of wetland values and extent to date, it is not possible to assess whether the Applicant has adequately identified the extent and values of wetlands to be affected. It is also not possible to determine the total area of wetlands that will be subject to offsetting (i.e., wetlands assessed as having "Moderate" ecological value or higher), or the total area of wetlands that will not be subject to any effects management (i.e., wetlands assessed as having less than "Moderate" ecological value).

34. Mr Goldwater has raised concerns with the Amended Mitigation Package, noting that it still uses a values-based approach to offsetting wetlands. He

has further advised that it ignores the potentially substantial loss of “Low value” wetlands, and does not account for cumulative effects of wetland loss in a region that has lost most of its original wetland extent. He is also of the view that the proposal applies "like-for-like" and "trading up" concepts in a manner that serves to eliminate rather than improve offset obligations. To ensure effects are appropriately offset, Mr Goldwater recommends the magnitude of loss should be assessed for each wetland, with the level of effect determining the offset ratio.

35. Mr Goldwater and Dr Martin have both raised concerns about the suitability of the two sites that have been identified for wetland offsetting at present. They are of the opinion that additional measures could be undertaken within the Proposed Designation to further manage adverse effects associated with the loss of wetland extent and values in line with this policy. For example, Dr Martin considers that a well designed and implemented wetland restoration project, with its quantum suitably determined based on a robust assessment of wetland loss and impacts, has a very high likelihood of achieving a net gain for the quality of wetland habitats within the Proposed Designation.

36. As Policy 6 does not distinguish between wetlands of different ecological value, I am of the view that the proposal is inconsistent with this policy in that the wetland values and/or extent to be lost have not been adequately identified and effects management is only proposed for a portion of affected wetlands (i.e. “High” and “Moderate” value wetlands). I consider Mr Goldwater’s recommendation to determine offset ratios based on the magnitude of adverse effect on each individual wetland, rather than primarily based on their ecological value, to be more consistent with Policy 6. Due to the current uncertainty regarding the suitability of potential wetland offsetting sites, I consider that all potential sites for wetland offsetting should be confirmed as soon as practicable.

NPS-FM Policy 7

37. Policy 7 of the NPS-FM directs that the loss of river extent and values is avoided to the extent practicable. The Applicant has concluded that the

project is partially consistent with Policy 7 as where reclamation cannot be avoided, stream realignments will be designed to mimic the streams they replace.

Stream reclamation, realignment, and culverting

38. The Applicant's proposed consent conditions indicate that offsetting is only proposed for total loss of stream habitat in five selected streams and for realigned streams located on spoil sites if realignment is unsuccessful, with no offsetting proposed for loss of habitat in intermittent streams, culverted streams, streams realigned on natural ground, or the majority of affected perennial streams.However, the Amended Mitigation Package indicates that offsetting is now proposed for the loss of value for all intermittent and perennial streams that are not culverted or realigned. I note that this amendment does not propose to offset the loss of stream extent, and that the total length of impacted stream that will and will not qualify for offsetting has not been clearly stated in the application or the Amended Mitigation Package.

39. The Amended Mitigation Package also states that where perennial and intermittent streams within the highest value area (Zone 2) are impacted by spoil, offsetting is to be undertaken at a higher ratio to incentivise avoidance during detailed design. However, the Applicant has not yet confirmed what this higher ratio would be.

40. Dr McEwan and Dr Storey are of the opinion that the methods used in the FWEA to assess adverse effects, including the modification of terms, aggregation of values, and the misapplication of scale, have resulted in an underestimation of adverse effects. Dr Storey has advised that this has resulted in most effects not being managed and most residual adverse effects, including those resulting from stream culverting and realignment, not being offset. In her expert advice, Dr McEwan has identified what she considers would constitute a reliable assessment of effects using appropriate methods.

41. In his expert advice, Dr Storey has also provided information to demonstrate why he considers that stream reclamation, culverting, and realignment result

in the degradation of ecological values and functions of streams. Dr Storey has concluded that the adverse effects of these activities, including effects on both intermittent and perennial streams, should be managed by applying the effects management hierarchy.

42. Dr Storey has also advised that in instances where offsetting has been proposed by the Applicant to manage adverse effects, the proposed offsetting measures are generally not appropriate or sufficient. He has provided recommendations to ensure that offsetting requirements are appropriately calculated.

43. I consider that the amended proposal to offset the loss of value for all intermittent and perennial streams (excluding those that are culverted or realigned), achieves greater alignment with Policy 7 which does not differentiate between streams of different ecological values. However, I note that under the amended proposal there is still no further management proposed to address any loss of intermittent stream extent, and any loss of stream extent and values from stream realignment and culverting.

44. If the Panel accepts the advice of Dr McEwan and Dr Storey that stream values, adverse effects, and offset requirements have been underestimated, then I consider that further assessment and management measures are required to ensure effects associated with the loss of extent and values are adequately addressed.

Realignment on spoil sites

45. The Applicant is proposing to implement additional management measures (offset and/or compensation) if realignment on spoil sites proves unsuccessful. However, the proposed consent conditions do not include a specified method for determining success, or any requirement for offsetting or compensation if realignment is deemed to be unsuccessful.

46. Dr Storey is of the view that there is a high chance that the realignments will fail to achieve viable stream habitat and therefore recommends that the effect of infilling stream valleys with spoil should be considered a total loss, and

therefore should be avoided where possible, or offset. He considers that offsetting for streams infilled by spoil should take into account the high probability that realignments on spoil will not create viable stream habitat, and recommends that offsetting requirements for stream infilling established upfront at the consenting stage, along with performance standards to ensure that anticipated ecological benefits are achieved.

47. I consider that the adoption of Dr Storey's recommendations would help to ensure consistency with this provision, as it is not possible to determine the potential loss of stream extent and values from realignment on spoil sites unless there are clear parameters around how success will be measured and monitored, and what additional actions are required if realignments fail to achieve the intended ecological outcomes.

Groundwater drawdown

48. The FWEA concludes that there is potential that groundwater arising from large cuts will result in aquatic habitat reduction or loss. However, it concludes that because of the nature of the existing streams and wetlands in those drawdown zones, the effect is most likely to be subtle macroinvertebrate assemblage changes. Therefore, no management is proposed to manage effects.

49. Dr Storey is of the view that the assessment under-represents the results presented in the Assessment of Effects on Groundwater. He further notes that based on published literature, the effects of groundwater drawdown will be measurable in at least 36.7 km of stream, and will be very obvious in the 11 km that have 0-20 percent of their flow remaining. Dr Storey considers that these effects likely will not be "less than minor", as is stated in the FWEA. He further recommends that any effects that cannot be avoided, minimised, or remediated should be offset.

50. To be consistent with this policy, any effects from the loss of stream extent and values should be managed.

Sedimentation

51. The Applicant is not proposing to undertake any mitigation measures to address effects of sedimentation on streams. This is on the basis of advice in the FEA which states that effects of sedimentation are not of ecological concern for the Pukekaroro and Waihoihoi catchments (increasing sediment loads in the catchments by 1.66% and 4.6% respectively), will raise sediment levels by 8.54% but not have long term impacts on significant macroinvertebrate (and fish) communities in the Ahuroa Catchment, and will have a more significant increase in sediment (16%) in the Wairau catchment which could result in degradation to downstream instream fauna and habitat. Noting that effects will be most significant in the Wairau, but will not be substantive or lasting, the Applicant has recommended a monitoring programme to determine the amount of suspended sediment discharged and an appropriate trigger level for further assessment to determine effects on the benthic community. However, no actions are proposed if monitoring identifies adverse ecological effects of any degree.

52. Dr McEwan has advised that there is currently insufficient information to determine the effects of sediment discharges on water bodies. However, she has noted that the anticipated percentage increases in sediment outlined in the FWEA may be inaccurate as the percentage increase will primarily affect the catchment downstream of the proposal, not the entrire catchment. Dr McEwan has further noted that the proposed threshold for triggering an assessment of effects on benthic communities (500 NTU) is a level far in excess of those at which sublethal negative effects have been documented for native fish.

53. Overall, Dr McEwan is of the view that the Applicant has not adequately considered the effects of settled sediment on species, habitat, and downstream receiving environments. She considers the proposed measures are not likely to adequately address effects of sediment discharge on the affected catchments and has recommended an approach she considers would more adequately identify and manage adverse effects.

54. Dr Burns has noted that the recieving environment includes riverine, estuarine, and coastal areas downstream of the proposal that provide habitat for avifauna including tara iti/fairy tern, New Zealand's most threatened bird species. He has advised that the additional release of sediment has the potential to increase stream turbidity and affect the clarity of the Waipū estuary, which could adversely effect the abundance, distribution and catchability of the fish species on which tara iti rely upon.

55. Given the above, I consider it is uncertain but likely that the proposal will result in adverse effects on stream values as a result of sedimentation and that these effects may not be adequately managed.

Other adverse effects on stream value and extent

56. Dr McEwan has noted that the FWEA provides some general statements that conclude effects related to contaminant discharge, instream works, fish mortality, aquatic biosecurity, stormwater management, and flow reduction "*will be appropriately avoided or minimised through standard management practices so that the effect will be 'less than minor*". As no detail is provided in relation to freshwater ecology to support these statements, Dr McEwan has advised that she is not able to provide technical assessment of these effects and associated management measures. It is therefore not possible to assess whether the these aspects of the proposal are consistent with this policy.

Conclusion

57. In conclusion, due to current gaps in information it is not possible to determine the total stream extent and values to be lost as a result of this proposal. Furthermore, the technical experts have differing views on the values impacted, the degree of effects anticipated, the level of effects management required, and the suitability of offset measures currently proposed.

58. If the Panel accepts the advice of Dr McEwan and Dr Storey, I consider that the proposal will be inconsistent with this policy due to adverse effects on stream values and extent from stream realignment, culverting, groundwater

drawdown, sedimentation, and potentially other effects including those associated with instream works, fish mortality, and aquatic biosecurity. If the Panel adopts the advice in the FWEA, I consider that the proposal will be inconsistent with this policy due to effects from stream realignment, culverting, and sedimentation which are anticipated to result in some degree of loss of stream extent and/or values, with no further management proposed.

National Policy Statement for Indigenous Biodiversity 2023

NPS-IB Policy 3

59. Policy 3 of the NPS-IB requires that a precautionary approach is adopted when considering adverse effects on indigenous biodiversity. Clause 3.7 of the NPS-IB further directs local authorities to adopt a precautionary approach towards activities where effects on indigenous biodiversity are uncertain, unknown, or little understood but those effects could cause significant or irreversible damage to indigenous biodiversity. The Applicant has not identified Policy 3 or Clause 3.7 as being of relevance to this proposal. I consider them to be of relevance given the uncertainty around the likely level of adverse effects on terrestrial ecology, and the likely success of proposed mitigation, offset, or compensation measures to adequately manage these effects.

60. The Terrestrial Ecology Assessment (Appendix D06 / TEA) has concluded that adverse effects on Hochstetter's frogs due to habitat removal (i.e., injury, death, displacement, increased predation, and resource pressure) would be "Very High" before mitigation and "Low" following mitigation. Proposed mitigation measures primarily consist of the salvage and relocation of frogs in release sites.

61. Hochstetter's frog is a 'deep endemic' species of Aotearoa New Zealand, found in isolated populations over the upper North Island and are considered to be clustered into at least 10 distinct genetic groups or 'clades'. The population in the Brynderwyn Hills forms part of the Northland clade, which

has a national Conservation Threat Status of 'At Risk – Declining' and, in Auckland, a Regional Conservation Status of 'Regionally Declining'.

62. Dr Burns is of the view that the likelihood of successfully relocating Hochstetter's frogs is highly uncertain due to the limited research on the success of salvage and release operations for this species. He has advised that to undertake this operation on such a large scale with no staging over time to test the suitability of release sites or to adapt management approaches as required, is placing this population at risk of considerable losses – in the order of thousands to perhaps tens of thousands of Hochstetter's frogs.

63. The Applicant has proposed a compensation payment for Hochstetter's frog with the stated intention to address the concerns raised regarding the likelihood of success of the proposed translocation process, and to address any demonstrated failure of that process. Dr Burns and Mr Goldwater have raised several concerns around the adequacy of this approach, including the lack of detail regarding how successful translocation will be determined, the difficulty in accurately determining frog mortality, and the likelihood that the suggested measures that compensation could be put towards would be able to achieve the intended protection and enhancement of existing Hochstetter's frog habitat. Mr Goldwater has concluded that the compensation measures are speculative and theoretical, providing no certainty that they could be successfully implemented.

64. Furthermore, the proposed compensation only accounts for residual adverse effects on frogs that are salvaged and relocated, it does not account for any adverse effects on frogs that are not salvaged and are subsequently injured or killed during habitat removal works.

65. Mr Goldwater has assessed the proposed compensation against the NPS-IB Principles of biodiversity compensation and has found it to generally be inconsistent with the principles. Of particular note is the proposal's inconsistency with Principle 2 of the NPS-IB which outlines when compensation is not appropriate. Mr Goldwater has advised that the

proposed compensation is inconsistent with this principle due to the irreplaceable and vulnerable nature of the Northland clade of Hochstetter's frog, the uncertain but potentially significant or irreversible effects on them, and the absence of a technically feasible option to secure a net gain within acceptable timeframes. Mr Goldwater has subsequently advised that, from an ecological perspective, avoidance is the only acceptable option to address adverse effects on Hochstetter's frog in accordance with the NPS-IB effects management hierarchy.

66. If the Panel accepts the advice of Dr Burns and Mr Goldwater, the effects of undertaking habitat removal are uncertain but could cause significant damage to Hochstetter's frog populations that cannot be adequately or appropriately addressed by the proposed compensation, necessitating a precautionary approach and more emphasis on avoidance and minimisation.

NPS-IB Policy 7

67. Policy 7 of the NPS-IB states that SNAs are protected by avoiding or managing adverse effects from new subdivision, use and development.

68. The Applicant has not provided a map identifying the location of any SNAs within the Proposed Designation and has provided conflicting information about the presence or absence of SNAs within the site. For example, page 18 of Volume B Appendix C state that there are no "SEAs" in the Whangārei or Kaipara District Plans, whilst page 61 of Appendix C states that the project will require some works in "SNA / significant ecological areas" in the Kaipara District.

69. In the Applicant's assessment against Policy 7, they have advised that the proposal is partially consistent with the policy because the proposal has not entirely avoided adverse effects on SNAs but will manage adverse effects, including by minimising habitat loss as far as practicable, replacement planting for kauri trees and indigenous plant species, replacement of high value wetlands and replacement of other wetlands where there are impacts on avifauna, and establishment of mitigation and release sites.

70. I have not identified any mapped SNA/SEAs within the Proposed Designation and therefore consider that for the purpose of the NPS-IB there are no SNAs within the site and that this Policy therefore is not of relevance.

NPS-IB Policy 8 and Clause 3.16

71. I consider that Policy 8 and Clause 3.16 of the NPS-IB are of relevance to the management of effects on indigenous biodiversity outside of SNAs.

72. Policy 8 of the NPS-IB requires that the importance of maintaining indigenous biodiversity outside SNAs is recognised and provided for.

73. Clause 3.16 of the NPS-IB more specifically directs:

    a) *If a new subdivision, use, or development is outside an SNA and not on specified Māori land, any significant adverse effects of the new subdivision, use, or development on indigenous biodiversity outside the SNA must be managed by applying the effects management hierarchy.*

    b) *All other adverse effects of any activities that may adversely affect indigenous biodiversity that is outside an SNA (other than indigenous biodiversity on specified Māori land (see clause 3.18)), must be managed to give effect to the objective and policies of this National Policy Statement.*

    c) *Every local authority must make or change its policy statements and plans to be consistent with the requirements of this clause.*

74. The Applicant has assessed the proposal to be partially consistent with this policy because areas of indigenous biodiversity will be avoided as far as practicable, and where they cannot be avoided, mitigation measures will be implemented to ensure that adverse effects on these areas of indigenous biodiversity, are adequately managed. They have not assessed the proposal against Clause 3.16.

75. I consider Clause 3.16 to be of relevance as the provisions in the relevant regional policy statement, and district plans are not entirely consistent with the requirements of the clause.

76. Policy 4.4.1 in the RPSN directs that adverse effects of subdivision, use, and development on specified matters are first avoided, remedied, or mitigated, and then offset or compensated so they are not significant. I consider that this policy is not entirely consistent with Clause 3.16 as it only applies to some specified matters (i.e., areas of predominantly indigenous vegetation, and indigenous ecosystems and habitats that are particularly vulnerable to modification), rather than indigenous biodiversity generally. I also note that the policy requires avoidance, remediation or mitigation, without any hierarchy. Likewise, the policy then requires offsetting or compensation, without any hierarchy.

77. The Operative Kaipara District Plan (2013) was made operative prior to the NPS-IB and has not been updated to be consistent with the requirements of Clause 3.16.

78. ECO-P2 of the Proposed Kaipara District Plan (2025) relates to the management of effects on indigenous vegetation and directs that adverse effects of subdivision, use and development must be avoided, remedied, or mitigated so that effects are no more than minor on specified indigenous biodiversity (i.e., Threatened and At-Risk indigenous biodiversity). The policy also directs that adverse effects be avoided, remedied, mitigated, offset, or compensated for to ensure no significant effects on specified indigenous biodiversity (including areas of predominantly indigenous vegetation, and indigenous species that are particularly vulnerable to modification). As with Policy 4.4.1 of the RPSN, I consider that this policy is not entirely consistent with Clause 3.16 of the NPS-IB as it does not apply to all indigenous biodiversity and does not require the application of the effects management hierarchy as defined in the NPS-IB.

79. Given the above inconsistencies, I consider that the proposal should also be assessed directly against Clause 3.16 of the NPS-IB, with greater weighting

given to the clause as it is contained within a higher order document to which regional plans, regional policy statements, and district plans must give effect to.

80. Policy ECO-P4 of the Whangārei District Plan (Operative in Part), directs to avoid, remedy, or mitigate adverse effects of land use activities on areas of indigenous vegetation and significant habitats of indigenous fauna, including areas of value to tangata whenua, as determined by ECO-SCHED1, so as to maintain its ecological values. I consider this policy to be partially inconsistent with Clause 3.16 as it relates to significant habitat of indigenous fauna rather than all habitat of indigenous fauna, and it does not require the application of the NPS-IB effects management hierarchy for significant adverse effects.

Indigenous vegetation outside SNAs

81. Dr Martin has advised that due to gaps in information, including gaps in the TEA and the Amended Mitigation Package, it has not been possible to undertake a comprehensive assessment of the proposal as it relates to terrestrial vegetation and habitat, including in relation to the values present, the anticipated level of effects on these values, and measures proposed to manage these effects.

82. Based on the information that has been provided, Dr Martin considers that the TEA has incorrectly assessed and understated the value of some indigenous vegetation and habitat within the site, and subsequently also underestimated the level of adverse effect and the level of mitigation required. As an example, Dr Martin has noted that almost all the forest remnant from an area of totara forest/broadleaved scrub is to be removed as part of the proposal, however the TEA has only assessed effects to be "Moderate" as the impacts of the project have been assessed jointly on an aggregated basis.

83. Dr Martin considers that the appropriate approach would be to assess impacts separately for this forest remnant, which would result in a "Very High" magnitude of effect, reflecting a major alteration of baseline conditions and the loss of a very high proportion of a feature. As a result of assessing the

effects as “Moderate” rather than “Very High”, no further mitigation or offset measures are proposed by the Applicant to address these effects. In instances where no mitigation or offsetting is proposed to address “Very High” levels of adverse effect, I would consider the overall level of effect to be significant.

84. Dr Martin has also advised that some of the proposed mitigation measures are not appropriate for addressing the effects the Applicant intends to address. For example, due to the location of proposed Mitigation and Release Sites, Dr Martin considers that they will not be able to provide mitigation for all affected vegetation types (i.e., rare forest types on alluvium) and they also will not be able to provide adequate mitigation for edge and fragmentation effects for forested areas to the west of the road. As a result of this, Dr Martin considers that the level of adverse effects remaining post-mitigation and/or offsetting have also been understated in some instances.

85. Dr Martin has advised that ecological interventions must be tailored to address the specific impacts to be incurred by the project. He has subsequently noted that the generous width of the designation corridor, and the typically poor state of forests and wetlands where livestock have access, present ample opportunities to address the impacts of this project through habitat restoration.

86. With regard to compensation, Dr Martin has advised that the Amended Mitigation Package and Indicative Compensation Approach include compensation for some vegetation types, however due to gaps and inconsistencies in the information provided, it has not been possible to comprehensively assess what is being proposed and whether it is adequate and appropriate for addressing residual adverse effects.

87. Dr Martin has concluded that a robust and complete assessment of ecological effects is needed and is yet to be provided. He has advised that this should form the basis for determining the appropriate mitigation and offset measures, and their quantum, to ensure the adverse impacts of the proposed road on terrestrial and wetland vegetation will be adequately addressed. Dr

Martin has further noted that a key change required for the Applicant's Amended Mitigation Package is the inclusion of a mitigation site that encompasses floodplain habitats, and is of sufficient size to address the losses that will be incurred for this habitat type.

88. I consider that if indigenous vegetation and habitat values have not been adequately identified, then it will not be possible to recognise and provide for the importance of maintaining them in accordance with Policy 8. It will also not be possible to determine the level of adverse effects on indigenous vegetation and habitat values or to then manage any significant adverse effects in accordance with the effects management hierarchy, as required under Clause 3.16.

89. If the Panel accepts the advice of Dr Martin, then further information and re-assessment is required from the Applicant before it is possible to determine the extent to which effects of the proposal on indigenous vegetation have been managed in accordance with the direction of Policy 8 and Clause 3.16 of the NPS-IB. Proposed measures to address adverse effects would also need to be amended to ensure they addressed the specific habitat types affected, noting that at least in some instances opportunities for this already exist within the site.

Hochstetter's Frogs

90. As noted above, the TEA and Dr Burns have differing views as to the level of adverse effects on Hochstetter's frogs from habitat removal (including as a result of injury or death) post-mitigation. The Applicant has subsequently proposed a compensation payment to address residual adverse effects, which Dr Burns and Mr Goldwater consider to be inadequate and inappropriate.

91. With regard to habitat loss and fragmentation, the TEA has concluded that there will be "High" levels of residual adverse effects on Hochstetter's frogs. Dr Burns agrees with the Applicant's conclusion that the proposal's overall level of mitigated adverse effect from habitat loss will be "High". However, in relation to habitat fragmentation he is of the opinion that no significant

mitigation has been provided and that the overall mitigated level of adverse effect will therefore remain “Very High” rather than “High”.

92. Due to the anticipated levels of residual adverse effects from habitat loss and fragmentation, the Applicant has concluded that further mitigation or offset measures are warranted. However, they are not proposing to confirm additional offset or mitigation measures until the detailed design stage, creating significant uncertainty around the actual effects of the project on Hochstetter’s frogs.

93. Furthermore, while the draft EMP (only currently required under the proposed Wildlife Approval conditions) includes measures for post release monitoring, these requirements are not reflected in the proposed Resource Consent or Designation conditions. The Applicant also has not proposed any requirements in the Resource Consent or Designation conditions (or the Wildlife Approval conditions) regarding what the trigger points for further offsetting measures would be, or how the amount of offsetting required would be calculated, creating further uncertainty.

94. Dr Burns has also identified numerous additional effects on Hochstetter’s frogs which the TEA has not accounted for. These include adverse effects associated with dewatering, edge effects on streams, increased water velocity, increased peak water flow through culverts, contamination of waterways from road runoff, increased predation, and mortality by vehicle collision. Dr Burns is of the view that the mitigation measures proposed by the Applicant will address few if any of the additional effects identified and are also insufficient to address the likely impact of effects identified in the TEA.

95. In the absence of confirmed offset or compensation measures to address residual adverse effects from habitat loss and fragmentation, I consider that adverse effects on Hochstetter’s frogs have not been adequately addressed and that the proposal is therefore inconsistent with Policy 8 and Clause 3.16 of the NPS-IB.

96. If the Panel accepts the advice of Dr Burns and Mr Goldwater, I would also consider the proposal to be inconsistent with Policy 8 and Clause 3.16 due to

the additional and largely unmitigated adverse effects not identified by the Applicant, the uncertain but potentially significant and irreversible effects from injury and death during habitat removal, the inability of the Indicative Compensation Approach to appropriately address residual adverse effects on translocated frogs, and the absence of any measures to address the loss of frogs that are not salvaged and are subsequently injured or killer during habitat removal.

Long-tailed Bats

97. The Applicant has confirmed that long-tailed bats are present within the Proposed Designation site. The TEA states that adverse effects from the proposal are likely to include habitat loss and fragmentation, injury or death during vegetation removal, mortality by vehicle collision, indirect disturbance from construction and operational activities. To mitigate these adverse, the Applicant proposes to employ the Department's Protocols for minimising the risk of felling bat roosts, and to implement ambient light level restrictions within 10 m of high-risk bat roost habitat. The proposed Mitigation and Release Sites are also intended to address loss and fragmentation of habitat. The TEA concludes that the overall mitigated level of effect will be "Low".

98. Ms Thurley has advised that while potential adverse effects on bats have been adequately assessed, the TEA does not include sufficient information regarding how bats are using the site, and the proposed mitigation measures to address habitat loss, habitat fragmentation, and vehicle collision are inadequate. Ms Thurley concludes that the effectiveness of mitigation measures has therefore been overstated. Acknowledging that further information is required to better understand how bats are using the site, and what mitigation would be most appropriate, Ms Thurley has noted that at present the overall level of effect from habitat loss post-mitigation is likely to remain Moderate, and the overall level of effects from habitat fragmentation and vehicle collision will likely remain High post-mitigation.

99. With regard to the Amended Mitigation Package and Indicative Compensation Approach, Mr Goldwater has advised that in his opinion the vegetation offset

and compensation measures cannot be relied upon to address effects on bats. He has further advised that any gains for bats should be identified and measured separately, not inferred from vegetation planted or protected in mitigation planting areas.

100. Long-tailed bats have a threat status of Threatened – Nationally Critical, meaning that the species is undergoing a "very high ongoing or predicted decline (>70%)". If the Panel accepts Ms Thurley and Mr Goldwater's assessments, I consider that further effects management is required to ensure consistency with Policy 8 and Clause 3.16.

Avifauna

101. The Avifauna Assessment has identified 87 species of avifauna recorded within or within a 5km buffer of the Proposed Designation. Of these, 18 are classified as At Risk and 11 as Threatened.

102. Dr Burns has advised that the avifauna survey undertaken to identify the presence of birds on site is inadequate due to the heavy reliance on desktop assessments. He has also noted that the total area of avifauna habitat affected by the proposal has likely been underestimated. This is in part because the TEA has not quantified the total habitat expected to be lost. This is in part also because the total wetland extent within the Proposed Designation may have been underreported, as Dr Martin has indicated.

103. In order to recognise and provide for the importance of indigenous biodiversity, as per Policy 8, I consider it necessary to first adequately identify avifauna and their habitat present within the site.

104. In general, Dr Burns agrees with the potential adverse effects identified in the TEA, however he has noted some additional effects. This includes habitat degradation as a result of dewatering, trapping of avifauna in wetlands, and sedimentation or other contamination of waterbodies including riverine, estuarine, or coastal habitats downstream of the site.

105. Of particular note, Dr Burns has advised that Nationally Critical Fairy tern / tara iti, currently have three feeding territories in Waipū estuary, which is the

receiving environment for the Waihoihoi and Ahuroa catchments. As noted above, the TEA states that there will be an increase in suspended sediment discharged into the Waipū river catchment as a result of this Project. Dr McEwan has advised that there is insufficient information to reliably assess effects of sedimentation on streams, however based on the information available she considers the anticipated levels of sediment discharge may have been underestimated. Likewise, Dr Burns considers that more information about these potential impacts should be provided and an assessment undertaken on how this might impact the downstream riverine, estuarine and coastal habitats of tara iti and other birds. Dr Burns has advised that additional siltation has the potential to affect the food resources of these birds during the critical spring and summer breeding season. He has further advised that any impact on food resources could adversely affect adult condition, chick provisioning rates, and ultimately breeding success.

106. As above, I consider that to recognise and provide for the importance of indigenous biodiversity, it is first necessary to identify all potential adverse effects, particularly those relating to Threatened or At Risk species. Any adverse effects should then be managed in accordance with Clause 3.16 of the NPS-IB, with any significant adverse effects managed by applying the effects management hierarchy.

107. As a way to manage potential adverse effects on tara iti/Fairy tern, Dr Burns has recommended that works that have the potential to release increased sediment loads into the Waipu river catchment should not be undertaken during the August to March period when tara iti/Fairy terns are using the Waipu estuary. I consider that the adoption of this recommendation would increase consistency with Policy 8 and Clause 3.16 of the NPS-IB, and also Policy 3 of the NPS-IB, given the potential for significant or irreversible damage to nationally critical tara iti/Fairy tern.

Lizards

108. The TEA has assessed the unmitigated level of effects on lizards to range from “Very Low” to “High” and has assessed the mitigated level of adverse effects

on lizards to be “Low”. Mitigation measures include the salvage and relocation of lizards, the creation of habitat at the Central Mitigation Site, stock exclusion, pest control, and infill and remediation planting.

109. Dr Burns agrees with the assessment of unmitigated effects on copper skinks but considers that the level of unmitigated effects on other lizards will be “Moderate” rather than “Low” or “Very Low”. Dr Burns considers it likely there will be other species of lizards present on site, possibly in moderate numbers, which could be affected by the proposal and which the TEA has not identified. This is in part due to the level of survey effort, which Dr Burns considers does not provide high confidence that other species are either not present or only in very low densities within the site. This is also because Dr Burns considers there is high quality habitat within the site and notes that Auckland and Northland regions are known to have reasonably high densities of lizards remaining in many lowland native forests.

110. Regarding proposed mitigation measures, Dr Burns has advised that both the proposed 5-year Mitigation Site pest control detailed in the TEA and the proposed 3-year post-release pest control detailed in the draft Ecological Management Plan are likely insufficient to allow the lizard population to recover to pre-construction numbers. Noting the short timeframe proposed, the large scale of the project, and the uncertainty around the effectiveness of pest control methods, Dr Burns is of the view that a predator proof fence in high quality lizard habitat within either the Northern or Southern Mitigation Sites would be a more effective solution..

111. Mr Goldwater has advised that for both lizards and kauri snails, the Applicant has treated measures that reduce mortality as if they also reduce permanent adverse effects of habitat loss and fragmentation. He is of the opinion that the residual adverse effects on lizards other than copper skink remain at least “Moderate” and that they should therefore be further offset or compensated.

112. If the Panel accepts the advice of Dr Burns and Mr Goldwater, I consider that the use of a predator proof fence would increase consistency with Policy 8

and Policy 3 of the NPS-IB by reducing uncertainty and increasing the likelihood that the lizard population recovers to pre-construction numbers.

Kauri Snails

113. The TEA has assessed effects of habitat loss, indirect habitat loss and degradation through fragmentation and edge effects, and injury or death during habitat removal and displacement as "High" before mitigation and "Low" after mitigation for the At Risk - Declining snail grouping. Dr Stavert is of the view that for kauri snails, the reduction in adverse effects has not been demonstrated as the affected habitat has not been quantified by construction stage, the proposed salvage of kauri snails cannot address permanent habitat loss or fragmentation, and release-site evidence is incomplete. Dr Stavert has also advised that whilst the presence of kauri snails has been confirmed at the Southern Site, the TEA has not established how many additional snails it can support. Furthermore, he has noted that the species have not been recorded at the Northern Site, for which no kauri snail-specific evidence of suitability has been provided.

114. With regard to funding legal protection and initial enhancement of existing indigenous forest, as detailed in the Indicative Compensation Approach, Dr Stavert has advised that the proposal does not identify the forests where protection funds would be spent or demonstrate gains for the affected invertebrate values. He concludes that based on the information provided it is therefore not possible to assess the extent to which the proposal would address those effects.

115. As noted above, Mr Goldwater is of the opinion that the permanent effects of habitat loss and fragmentation remain after mitigation, and that the Applicant's reasons for offering no offset or compensation are therefore unjustified.

116. Based on Dr Stavert's advice, it appears that there is not currently sufficient information available to demonstrate that the proposed mitigation measures will achieve the anticipated level of "mitigation" and it is therefore not possible to assess whether the proposal is consistent with Policy 8 or Clause

3.16. To ensure consistency with these provisions, the Applicant should provide sufficient information to demonstrate that any significant adverse effects, including effects on habitat loss, will be managed in accordance with the effects management hierarchy, with any more than minor adverse effects appropriately offset or compensated for. Given the current level of uncertainty, I also consider the proposed management of snails to be inconsistent with Policy 3 of the NPS-IB.

NPS-IB Policy 15

117. Policy 15 of the NPS-IB states that areas outside SNAs that support specified highly mobile fauna are identified and managed to maintain their populations across their natural range, and information and awareness of highly mobile fauna is improved. The Applicant notes that habitat of highly mobile fauna is present within the site and that effects on these areas are to be managed through the replacement of habitat, particularly in relation to cryptic marsh birds. The Applicant concludes that the proposal will be consistent with this policy.

Long-tailed bats

118. The NPS-IB identifies long-tailed bats as specified highly mobile fauna. As noted above, Ms Thurley is of the opinion that the bat surveys that have been undertaken are adequate for identifying the presence of bats on site but do not provide sufficient information about how bats are using the site. Therefore, it is not possible to comprehensively assess the magnitude and level of effects of the proposal on bats, or to determine what mitigation, offsetting or compensation measures are most appropriate to address these effects.

119. I consider that additional bat surveys would help to identify which areas within the site support long-tailed bats and subsequently what measures would be most appropriate to manage effects on them, achieving greater alignment with Policy 15.

Avifauna

120. The Avifauna Assessment (Appendix D08) has identified 12 species of avifauna within or within a 5km buffer of the proposed designation that are identified as specified highly mobile fauna under the NPS-IB. These are Australasian bittern, white heron, black-fronted tern, brown teal, grey duck, black-billed gull, NZ dabchick, South Island pied oystercatcher, North Island fernbird, NZ pipit, spotless crake, and North Island kākā.

121. As noted above, Dr Burns has advised that the assessment of avifauna species present is inadequate and that it is not surprising that wide-ranging, sparse, cryptic or nocturnal species have been listed as not present as no targeted surveys were carried out to identify them. Of particular relevance, Dr Burns has advised that the applicant should have undertaken monitoring for Australasian bittern, spotless crake, and North Island fernbird at each wetland within the Proposed Designation that contained suitable habitat for these species.

122. As Dr Burns has noted, more targeted avifauna surveys would help to better understand the presence and abundance of avifauna on site, and to better inform whether any additional effects management is required to ensure consistency with this policy.

Regional Plan for Northland 2026

123. Policy D.2.9 of the Regional Plan for Northland (RPN) directs that when considering the appropriateness of a Regionally Significant Infrastructure activity (except the National Grid), to have regard and give appropriate weight to matters including:

    a) the extent to which the adverse effects of the activity can be practicably managed, inclusive of any positive effects and environmental offsets or compensation proposed; and

    b) whether an adaptive management regime (including modification to the consented activity) can be used to manage any uncertainty around the occurrence of residual adverse effects.

124. The Applicant has concluded that the proposal is consistent with this Policy but has not directly assessed the matters above.

125. In relation to the extent to which adverse effects can be practicably managed, and as noted above, the Applicant has proposed to address some adverse ecological effects but not others. For example, no measures are proposed to address the loss of stream values and extent from culverting or realignment on natural ground, and no measures are proposed to address the loss of extent and values for wetlands with "Low" ecological value, Furthermore, the measures to offset more than minor residual adverse effects from loss of Hochstteter's frog habitat will not be confirmed until the detailed design stage, leaving it unclear the extent to which these measures may or may not address adverse effects.

126. As detailed above, the Department's technical experts have identified practicable opportunities to offset adverse effects within the Proposed Designation which could better address adverse effects such as the loss of streams, wetlands, and indigenous vegetation. I consider that the adoption of these additional measures would ensure greater consistency with Policy D.2.9.

127. I consider that the policy direction to have regard and give appropriate weight to whether an adaptive management regime can be used to manage any uncertainty around the occurrence of residual adverse effects is of relevance to the proposed salvage and release of Hochstetter's frogs. As noted above, Dr Burns is of the view that there is considerable risk in undertaking such a large-scale operation with no staging over time to test the suitability of release sites or using adaptive management approaches. Given the frog's national threat status of "At Risk – Declining", the large numbers of frogs likely to be present, and due to the high level of uncertainty regarding the likely success of the operation, it would be beneficial to understand why the applicant has chosen not to employ adaptive management in accordance with this policy.

128. Policy D.2.18 relates to the management of adverse effects on indigenous biodiversity and requires that adverse effects of activities on indigenous

biodiversity outside the coastal environment are managed by (among other measures) avoiding, remedying, or mitigating adverse effects so they are no more than minor on:

a) indigenous taxa that are listed as threatened or at risk in the New Zealand Threat Classification System lists; and

b) areas of indigenous vegetation and habitats of indigenous fauna that are significant using the assessment criteria in Appendix 5 of the Regional Policy Statement for Northland.

129. Policy D.2.18 also directs that it be recognised that significant residual adverse effects on biodiversity values can be offset or compensated.

130. As noted above, the Applicant has concluded the level of mitigated adverse effects from habitat loss and fragmentation on Hochstetter's frog (At Risk – Declining) will be "High" and "Very High" respectively, but has not confirmed how these residual adverse effects will be appropriately offset or compensated. I consider this to be inconsistent with Policy D.2.18. Furthermore, Dr Burns considers that the mitigated level of adverse effects on Hochstetter's frogs from habitat removal (including injury or death) will be "High", and Dr Burns and Mr Goldwater are of the view that the measures proposed to compensate for any residual effects are uncertain, inadequate, and not appropriate in this instance.

131. Ms Thurley has advised that after mitigation, adverse effects of habitat fragmentation and vehicle collision on Long-tailed bats (Threatened – Nationally Critical) will likely be "High" and effects of habitat loss will likely be "Moderate".

132. If the Panel accepts the advice of Dr Burns, Mr Goldwater, and Ms Thurley, I consider the proposal to also be inconsistent with Policy D.2.18 due to significant adverse effects on Hochstetter's frog and long-tailed bat, which have not been appropriately offset or compensated for.

133. With regard to indigenous vegetation, the Applicant has not provided an assessment of indigenous vegetation against the RPSN significance criteria.

However, as noted above, Dr Martin has identified some areas within the designation that would meet the significance criteria in the RPSN and has noted that further information is required to assess other areas. For those sites that have been identified, it is somewhat unclear whether adverse effects are anticipated. Dr Martin has advised that due to information gaps and the use of inconsistent terminology it has not been possible to undertake a comprehensive assessment. However, based on the information available, he has advised that the proposal could result in the loss of areas meeting the RPSN significance criteria. This includes areas of kahikatea treeland, and areas incorrectly identified as Crack willow-exotic trees-remnant native trees/mixed exotic and native shrub.

134. The Applicant has proposed offsetting and compensation to address some adverse effects on indigenous biodiversity, including as part of their Amended Mitigation Package document. Due to the gaps in information, including no Biodiversity Offset Accounting Model (BOAM), no explanation for the different offset ratios, and no information regarding how the compensation fee was calculated, it is unclear whether the proposed offset and compensation measures will adequately address adverse effects on significant indigenous vegetation. Based on the available information, Dr Martin and Mr Goldwater have identified several concerns regarding the proposed offsetting and compensation measures. This includes concerns about the use of offset ratios that are too low, the use of an averted loss approach to compensate for effects on rare alluvial forests, and inconsistencies with some of the principles of biodiversity compensation in the NPS-IB.

135. I consider that further information is required to determine effects on significant indigenous vegetation and to assess whether the proposal will be consistent with this policy.

136. Policy D.4.23, established in accordance with clause 3.22 of the NPS-FM, is also of relevance and states that effects on wetland extent and values associated with the construction of specified infrastructure must be managed by applying the effects management hierarchy. The Applicant states that the project will avoid natural inland wetlands as far as practicable and where the

Project will impact on a number of natural inland wetlands that are unable to be avoided, ecological offsetting is proposed.

137. As noted above, the Applicant is only proposing to offset effects on moderate and high value wetlands. I consider that the use of wetland values, rather than effects on wetland extent and values, to determine whether to offset effects on wetlands is inconsistent with the effects management hierarchy and therefore inconsistent with this policy.

138. As also noted above, Dr Martin has advised that due to the underestimation of some wetland values, the Applicant's current approach to wetland management will result in adverse effects that are more than minor for a suite of wetlands other than Wetland 24, without any proposed measures to manage these effects.

139. Mr Goldwater has further advised that this approach does not take into account cumulative effects, or effects from the potentially substantial loss of "Low value" wetlands. He has also raised concerns around the adequacy of the Applicant's proposed measures to offset residual adverse effects.

140. If more than minor residual adverse effects on wetland extent and values are not appropriately offset or compensated for, as indicated by Dr Martin and Mr Goldwater, I consider the proposal to be inconsistent with Policy D.4.23 of the RPN.

141. Policy D.4.27 directs that when assessing an application for resource consent for an earthworks, vegetation clearance, or land preparation activity and any associated discharge of a contaminant, to ensure the activity will avoid significant adverse effects, and avoid, remedy or mitigate other adverse effects on aquatic ecosystem health, indigenous biodiversity in water bodies and coastal water and receiving environments that are sensitive to sediment accumulation (among other matters).

142. As noted above, the Applicant has recommended a monitoring programme to determine the amount of suspended sediment discharged and an appropriate trigger level for further assessment to determine effects on the benthic

community. However, there is currently no requirement for any actions to be undertaken if monitoring identifies any effects of concern.

143. As also noted above, Dr McEwan and Dr Burns have raised concerns regarding the assessment and proposed management of adverse effects on water quality and aquatic ecology as a result of sedimentation, including effects on areas already facing high levels of sedimentation including the Kaipara Harbour.

144. I therefore consider it is uncertain but likely that the proposal will not avoid, remedy, or mitigate adverse effects on aquatic ecosystem health, indigenous biodiversity in water bodies and coastal water and receiving environments that are sensitive to sediment accumulation. As the policy directs one to ensure effects are avoided, remedied, or mitigated, I consider the proposal to be inconsistent with this policy. I also consider it possible that the proposal could result in significant adverse effects.

145. Policy D.4.30, established in accordance with clause 3.24 of the NPS-FM, is of relevance and states that for specified infrastructure the loss of river extent and values must be avoided unless the effects of the activity are managed by applying the effects management hierarchy. The Applicant has assessed the proposal to be consistent with this policy due to adequate management of effects on river and stream extents and values.

146. I consider this policy to be of relevance for activities including the reclamation, diversion, and culverting of streams, groundwater drawdown, and the discharge of sediment and other contaminants to streams. I note that alignment with this provision relies in part on the level of anticipated adverse effect pre and post mitigation, noting the Department's technical experts do not agree with all of the conclusions of the Applicant's technical experts in this area, and in some instances consider that additional information is required before effects can be fully understood.

147. To be consistent with this policy, any more than minor residual adverse effects from the loss of river extent or values will need to be appropriately offset or compensated in accordance with the principles for aquatic offsetting and

compensation detailed in Appendix 6 and 7 of the NPS-FM. If the Panel finds that the assessment of effects is insufficient and requires reassessment, the proposal should subsequently be reassessed against this policy noting any additional mitigation and any additional offsetting or compensation proposed by the Applicant.

Operative Kaipara District Plan 2013 (OKDP)

148. As noted above, I consider that the OKDP has not been updated to be consistent with the requirements of Clause 3.16 of the NPS-IB and should therefore be read alongside the clause, with greater weighting given to the higher order document.

149. Policy 6.6.2b directs that where disturbance of significant indigenous vegetation and significant habitats of indigenous fauna cannot be avoided, it should be undertaken in a way that minimises and/or mitigates adverse effects as far as practicable.

150. The Applicant has advised "*Adequate mitigation measures will be implemented to ensure that adverse effects on significant indigenous vegetation and significant habitats of indigenous fauna are minimised and/or mitigated, as far as practicable. Due to the linear nature of the Project and complex landscape and ecological environment, complete avoidance cannot be practicably achieved. Overall, the Project is partially consistent with Policy 6.6.2b*".

151. The Applicant has not identified areas of significant indigenous vegetation or significant habitat of indigenous fauna and therefore it is not possible to comprehensively assess consistency with this provision.

152. I note that "Significant indigenous vegetation and significant habitat of indigenous fauna" are not included in the definitions section of the OKDP. However, Chapter 6 (Ecological Areas) states:

> *"In Part 2, the Resource Management Act 1991 requires that areas of significant indigenous vegetation and significant habitats of indigenous fauna are protected. Areas identified in Department of Conservation's Protected*

Natural Areas Survey programme as being internationally or nationally important will have the highest priority when allocating resources to assist with their protection.

In evaluating the "significance" of other areas, Northland Regional Policy Statement provides guidance to Council and the criteria" set out in Appendix III of that Statement will be applied."

153. As noted above, Dr Martin has identified numerous areas within the project that would meet the RPSN significance criteria, however he has not been able to complete an assessment of the full site due to current gaps in information.

154. To ensure consistency with this policy, areas of the site that meet the above criteria for significant indigenous vegetation and significant habitat of indigenous fauna should first be identified. It should then be demonstrated that any adverse effects on these areas have been minimise and/or mitigated as far as practicable.

Proposed Kaipara District Plan 2025 (PKDP)

155. ECO-P2 directs that outside the coastal environment adverse effects of subdivision, land use and development must be avoided, remedied, or mitigated to ensure adverse effects are no more than minor on Threatened and At-Risk indigenous species, areas of significant indigenous vegetation and significant habitat of indigenous fauna. Adverse effects on areas of predominantly indigenous vegetation, and indigenous species, habitats and ecosystems that are particularly vulnerable to modification, must be avoided, remedied, mitigated, offset, or compensated to ensure they are not significant.

156. As previously noted, I am of the view that this policy is not entirely consistent with Clause 3.16 of the NPS-IB and should therefore be read alongside the clause, with greater weighting given to the higher order document.

157. Based on the advice from Ms Thurley and Dr Burns, residual adverse effects on long-tailed bats and Hochstetter's frogs (from injury or death, habitat loss, and habitat fragmentation) will be more than minor. Based on the conclusions

in the TEA, residual adverse effects on Hochstetter's frogs from fragmentation and habitat loss will be more than minor and will require additional management measures that are yet to be determined.

158. If the Panel accepts the above advice and concludes that the proposal will result in more than minor residual adverse effects on Threatened or At Risk species, I would consider it to be inconsistent with Policy ECO-P2.

159. Based on the advice from Dr Martin, I consider that there is potential for significant adverse effects on predominantly indigenous vegetation. However, further information is required to determine the level of effect and to confirm whether any effects management is proposed.

160. I note that the PKDP does not include mapped areas of significant indigenous vegetation and significant habitats of indigenous fauna at this point in time. The plan states that identifying and mapping these areas will occur through a future plan change in accordance with national policy requirements.

161. Policy EW-P2 relates to the management of adverse effects from earthworks. Clause 6 of this policy directs adverse effects to be managed to ensure that earthworks do not occur in locations where this would result in significant adverse effects on cultural or ecological values. The Applicant has assessed the proposal to be consistent with this policy and specifically in relation to Clause 6 they have advised that earthworks in SNAs will be avoided as much as practicable and where they cannot be avoided, mitigation measures are proposed to ensure adverse effects on SNAs are appropriately managed.

162. I note that this policy relates to significant effects on ecological values, rather than specifically to effects on SNAs. I also note the Terrestrial Ecology Assessment has assessed effects on Hochstetter's frogs from habitat loss and habitat fragmentation to be "High" post mitigation. I would consider this to be a significant adverse effect.

163. As the Applicant has not provided any specific measures or any proposed conditions to ensure residual effects from the fragmentation and loss of

Hochstetter's frog habitat are further reduced, I consider the proposal to be inconsistent with this policy.

Whangārei District Plan Operative in Part 2022 (WDPOP)

164. Policy DGD-RSI-O3 (Adverse Effects) directs to avoid, remedy, mitigate or offset adverse effects arising from the development, operation, maintenance, and upgrading of regionally significant infrastructure.

165. As noted above, the Applicant is not proposing to avoid, remedy, mitigate or offset some of the anticipated adverse effects associated with the proposal. This includes adverse effects on areas of indigenous vegetation, wetlands, and streams. For other adverse effects, such as the residual adverse effects on Hochstetter's frogs from fragmentation and loss of habitat, the Applicant is proposing to develop offsetting requirements at the detailed design stage after a decision has been made on this application. This creates significant uncertainty about the likely level of mitigation or offsetting to be achieved and is exacerbated by the fact that the Applicant has not currently proposed any conditions to ensure further offsetting or compensation is undertaken. For these reasons, I consider the proposal to be inconsistent with this policy.

166. Policy ECO-P1 (Significant Indigenous Vegetation and Significant Habitats of Indigenous Fauna) states: To recognise as significant, and provide protection for, indigenous vegetation and habitats of indigenous fauna, including indigenous wetlands, which are of Moderate, Moderate-High, High and Outstanding value using the criteria set out in ECO-SCHED1.

167. The Applicant notes that the proposal will enhance some areas of significant indigenous vegetation and significant habitats of indigenous fauna through mitigation planting and enhancement of existing vegetation, and maintenance and monitoring requirements for mitigation planting. The Applicant concludes that the proposal is therefore partially consistent with this policy.

168. The Applicant has not undertaken an assessment of significance using the Criteria in ECO-SCHED1, therefore it is not possible to assess whether the

Applicant has recognised and provided for significant indigenous vegetation and significant habitats of indigenous fauna within the Proposed Designation.

169. Policy ECO-P4 directs to avoid, remedy, or mitigate adverse effects of land use activities on areas of indigenous vegetation and significant habitats of indigenous fauna, including areas of value to tangata whenua, as determined by ECO-SCHED1, so as to maintain its ecological values.

170. I note that the Applicant is not proposing to address all adverse effects on indigenous vegetation and has not identified whether there are any areas of significant habitats of indigenous fauna within the Proposed designation.

171. As detailed previously, I also consider that this policy is not entirely consistent with Clause 3.16 of the NPS-IB and should therefore be read alongside the clause, with greater weighting given to the higher order document.

Comments on conditions

172. I have reviewed the Applicant's proposed Designation and Regional Resource Consent conditions dated 13 July 2026 and provide the following general comments. However, I note that further information and/or clarification is required to fully understand the proposal and anticipated effects before a detailed review of conditions can be undertaken.

173. I have not provided any commentary in relation to the Amended Mitigation Package and Indicative Compensation Approach as the Applicant's proposed conditions have not been updated to reflect these.

Proposed outcomes

174. Within their application and supporting technical reports the Applicant has identified areas where additional mitigation or offsetting may be required and stated that this will be dealt with at the detailed design stage and/or once monitoring has confirmed the actual degree of adverse effect.

175. I note that in several instances the Applicant has not included proposed conditions outlining the methods for determining when further actions are required, and what those further actions must achieve. Examples of this

include mitigation requirements for frogs and for realigned streams on spoil sites. In order to give effect to the statements in the application, the Applicant would need to update their proposed conditions to ensure that any offset or mitigation measures proposed by the Applicant are included as conditions of consent. Conditions should include comprehensive information around what the offsetting or mitigation is intended to achieve, how success will be measured, what the trigger points will be for determining whether further actions are required, how the amount of mitigation/offsetting/compensation required must be calculated, how often and what kind of monitoring will be required to assess effects and identify whether trigger points have been reached, and how these actions will be recorded and reported.

176. There is significant uncertainty regarding the actual level of effects that the project will have, largely because the final alignment has not yet been confirmed. There is also a high level of uncertainty regarding the likelihood that proposed mitigation measures will achieve their intended outcomes. Examples of this include the uncertainty around the salvage and relocation of Hochstetter's frogs (particularly due to the scale of the exercise, and uncertainty regarding survival as Dr Burns explains in his statement of advice) and the realignment of streams on spoil sites. This amplifies the need for clear processes around assessing actual levels of adverse effects, determining actual levels of mitigation achieved, identifying the need for further management, and implementing further actions. If these requirements are not clearly outlined in the conditions, there is no certainty that effects will be managed as proposed.

Lizards, Hochstetter's Frogs, and Kauri Snails

177. The Applicant has not included specific reference to lizards, Hochstetter's frog, or invertebrates in their proposed Designation or Regional Resource Consent Conditions, despite Volume B (RMA Approvals) of their application assessing effects on these fauna and proposing mitigation and offset measures to address those effects. I consider that effects on lizards, Hochstetter's frog, invertebrates (including kauri snaial) and their habitat are

within scope for these consents and consider that the conditions should include specific details for monitoring and managing effects on these.

Mitigation and Release Sites

178. The planting and enhancement of the Northern, Central, and Southern Mitigation and Release sites form a core part of the Applicant's proposed mitigation measures to address adverse ecological effects. Page 63 of Volume B specifically states that these sites "*will be managed to mitigate for multiple ecological effects across a range of sensitives (vegetation, freshwater, wetland, lizards, snails, bats, frogs, and birds) and could also act as release sites for salvaged fauna*". I therefore consider that the effects to be mitigated by these sites include effects associated with activities managed under the proposed resource consent and designation, as well as activities managed under the proposed wildlife approvals.

179. The proposed Resource consent and designation conditions currently do not include any specific reference to these sites. To ensure that the anticipated mitigation is achieved, the resource consent and designation conditions should be amended to include specific requirements for mitigation and release sites. As noted above, this should include specific reference to the outcomes sought for each individual environment or value (i.e. bats, frogs, indigenous vegetation types), monitoring and reporting requirements, and actions to be undertaken if the sites are not able to achieve the outcome sought (i.e., further offsetting or compensation).

Conclusion

180. In summary, given the information gaps in the application documents there is not a reliable basis on which to draw robust conclusions regarding the ecological values present, the likely adverse effects on these, and the adequacy of proposed mitigation, offset, or compensation measures. This is further exacerbated by the Applicant's proposed conditions which are missing detailed information and/or requirements necessary to ensure adverse effects are avoided, minimised, remedied, offset, or compensated as proposed.

181. Based on the information that is available, the Department's technical experts have identified several areas where they consider the values and effects have, or have likely been, underrepresented and areas where the proposed mitigation is inadequate and inconsistent with relevant guidelines and standard practice. This includes the underestimation of adverse effects and/or overestimation of the effectiveness of proposed mitigation measures to address effects on long-tailed bats, wetlands, streams, and indigenous vegetation, avifauna, Hochstetter's frog, snails and lizards.

182. The differences in opinion between the Department's technical experts and the Applicant's technical experts have implications for the assessment of the project against relevant planning provisions. However, in some instances, it is apparent that the proposal is inconsistent with planning provisions, regardless of whether one accepts the effects assessment of either technical expert. For example, the Applicant has assessed residual effects of habitat loss and fragmentation on Hochstetter's frog to be "High" and has not provided any information, or included any proposed conditions, outlining how these residual effects will be further managed. This is clearly inconsistent with Policy D.2.18 of the RPN and Policy 8 and Clause 3.16 of the NPS-IB.

183. It is also evident that a number of activities could be undertaken within the Proposed Designation to further avoid, mitigate, offset, or compensate for adverse ecological effects. This includes fencing to exclude livestock from existing forests and wetlands, plantings, the inclusion of a mitigation site that encompasses floodplain habitats, and the establishment of a predator proof fence. These measures would increase consistency with provisions in the NPS-FM, NPS-IB, RPN, OKDP, PKDP, and WDPOP, whilst also maintaining consistency with the NPS-I.

184. Overall, I consider that there is currently insufficient information available to adequately understand the ecological effects of the proposal or assess those effects against the relevant planning provisions.