Submission No: 19

Submission on Matamata-Piako District Council Proposed Private Plan Change 57: Calcutta Farms

9 November 2022

To: Matamata-Piako District Council
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1. **Trade competition declaration**

   Forest & Bird would not gain an advantage in trade competition through these submissions.

2. **Hearing Options**

   We wish to be heard in support of this submission. We would consider presenting a joint case with others making a similar submission.

3. **Submission Details**

   Forest & Bird is New Zealand's largest non-governmental conservation organization with many members and supporters. The main purpose of Forest & Bird is the preservation and protection of the indigenous flora and fauna and the natural features of New Zealand.

   In support of that purpose, Forest & Bird regularly participates in resource management processes relating to biodiversity across Aotearoa New Zealand.

   Forest & Bird's Waikato Branch is actively involved in regeneration projects and monitoring local and regional environmental issues. We have met and discussed this submission and the branch fully endorses it.

   In the first instance Forest & Bird opposes the plan change but if the Commissioner(s) are still minded to grant the plan change then the changes that Forest & Bird requests are set out in detail in our submission in Appendix 1.

Barbara Hammonds

APPENDIX 1

Relevant Biodiversity Values of Matamata-Piako District and the wider area

1. Nature is under threat across the world. We face a biodiversity crisis, and things are getting worse not better.[1],[2]
2. Pekapeka-tou-roa long-tailed bats have New Zealand's highest conservation status of Threatened – Nationally Critical[3]: 'most severely threatened, facing an immediate high risk of extinction.'[4] This means they face the greatest risk of extinction, the same category as the kākāpō and New Zealand fairy tern/tara iti.
3. They were once widespread in Aotearoa[5]. In the early 1900's 'bats were regularly seen in all our cities with reports of seeing them in their hundreds and thousands. Since then, there have been significant declines and in the areas that they survive they are still in decline and are now threatened with extinction.'[6]
4. Long-tailed bats have been reduced to today's isolated populations, one of which is in the wider area around southern Hamilton City. While it is not known if long-tailed bats use the area of PPC57, Matamata is not far as the bat flies from this well-known population, only 40km from southern Hamilton, and only 30km from where bats are known close to Cambridge[7].
5. The adjacent Mangawhero Stream and associated vegetation, plus the row of pin-oaks along Tauranga Rd and the pasture with some existing trees present, appear to be potential bat habitat. The District Plan maps show the vegetation along the Mangawhero Stream close to the PC57 area as a Significant Natural Feature.
6. Due to their critically endangered status, 'This makes the Hamilton long-tailed bat population important for national species management and conservation.' [8] This is the main reason we oppose the Proposed Private Plan Change, unless bats can be shown not to be present.
7. Threats include ship rats, stoats, possums, cats, habitat destruction, habitat fragmentation and habitat degradation.[9]
8. The Ecological Assessment (Appendix H of the application) makes no mention of any ecological effects except in relation to stormwater.
9. The Application makes this blanket statement: 7.6 Ecological Effects '… it is considered that any adverse ecological effects on the Mangawhero Stream and environs, that arise

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[1] https://www.unep.org/news-and-stories/press-release/nature-humanity-crossroads-un-warns Accessed 21 October 2022

[2] https://www.nature.com/articles/d41586-019-01448-4 Humans are driving one million species to extinction: on the findings of the landmark IPBES report on biodiversity and ecosystem services 2019. Accessed 21 October 2022

[3] https://www.doc.govt.nz/nature/native-animals/bats-pekapeka/long-tailed-bat/ accessed 11 October 2022

[4] Conservation status of plants and animals: Nature (doc.govt.nz) accessed 11 October 2022

[5] See footnote 3

[6] Department of Conservation Moira Pryde Evidence Bat Ecology 16 Sept 2022, accessed from https://hamilton.govt.nz/property-rates-and-building/district-plan/plan-changes/plan-change-5/ pp6-7

[7] Summary of 2022 Cambridge East bat survey for Waipa District Council. Titoki Landcare Limited, 30 Sept 2022; letter to Waipa District Council.

[8] Project Echo 2021 Hamilton City Wide Bat Survey, Harvey Aughton – Go Eco, nd. p3

[9] See footnote 3

from the plan change, are acceptable.'[10] Without further research, specifically to verify the presence or absence of long-tailed bats, this statement is not plausible. Absence of evidence is not the same as evidence of absence.

Bats

10. The RMA Section 6(c) requires *'The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna'*. The proposal in its current form will not achieve this for pekapeka-tou-roa long-tailed bats if they are present.

11. Bat habitat is already being destroyed, fragmented and degraded in the wider area due to changes in land use, including the Peacocke Structure Plan Area (PSPA, Hamilton City Council Plan Change 5, still being heard): rural to medium-high density residential; and Private Plan Change 20 for Waipa DC – Hamilton Airport Northern Precinct Expansion (yet to be heard): rural to industrial / business.

12. There are large knowledge gaps in what is needed for bat populations to survive:

> To better understand the effects of development and construction activities on the Hamilton's bat population, it is important to identify key aspects of what enables bats to persist in the landscape. The impact of habitat fragmentation, pressure from pest animals, the role of lighting and noise in Hamilton City and its surroundings need to be properly understood. Additionally, more information on social structures within and between Hamilton's bat populations is needed to inform future management of bats in Hamilton and its wider landscape.
>
> Due to the cryptic nature of bats and the limited amount of research done in this area, it is challenging to quantify the effects of all these impacts.[11]

13. In relation to protecting biodiversity from the impacts of development, Commissioner Direction 7 for HCC PC5, 7 October 2022, states:

> … 4 The Panel also takes note of Ms Hooper's comments on the matter of compensation, the concerns raised in evidence regarding the effects management hierarchy, and the fact that those matters are yet-to-be-determined.[12]

14. Although this is a different plan change and a different council, there is no reason to believe the effects management hierarchy would not need to be considered here, and that, in order to protect 'significant habitats of indigenous fauna', avoid, remedy and mitigate will need to be applied, and in that order, and before offsetting and compensation.

15. If bats are present, foraging habitat must be protected. Bats forage over pasture. Any further loss must be avoided.

16. Bat corridors (migratory pathways) must be protected. Any further loss must be avoided. Bat corridors need to be well vegetated, and of a minimum width, perhaps 50m.

17. Roost trees / habitat or potential roosting habitat must be protected. Any further loss must be avoided. Simply applying tree-felling protocols is insufficient for this highly mobile, critically endangered species, whose roost trees are already in short supply.

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[10] https://www.mpdc.govt.nz/component/fileman/file/CouncilDocuments/Plans/DistrictPlan/ProposedPlanChanges/PPC57/Plan%20Change%20Application%20-%20Calcutta%20Farms%20Ltd.PDF?routed=1&container=fileman-files

[11] https://waikatoregion.govt.nz/assets/WRC/WRC-2019/Project-Echo-Hamilton-city-survey-2020-report.pdf HAMILTON CITY LONG-TAILED BAT SURVEY For Project Echo, 4Sight Consulting, pp9-10

[12] https://hamilton.govt.nz/property-rates-and-building/district-plan/plan-changes/plan-change-5/

18. Light impacts must be avoided: not just by controls on street lighting, but also other light sources such as car headlights and security lighting. Matters such as maximum light levels allowed to enter protected bat areas need to be decided as part of the Plan Change process. This will enable screening planting to be done well ahead of when any land use change happens, so it can reach the required height and density before car headlights, security lights etc. become an issue.
19. Noise impacts must be avoided for a species that uses echo-location.
20. Predators of bats, including cats, will become more widespread if this proposed Plan Change goes ahead: pest animals follow roads; and are also attracted by food sources like the increase in food waste which accompanies any increase in human activity. Any Ecological Management Plan should therefore include a requirement for ongoing pest management.
21. Scientific studies have shown that both feral and domestic cats are significant predators of bats, as referred to in these August 2022 newspaper articles: 'Serial bat killer' cat uncovered in research on endangered pekapeka | Stuff.co.nz[13] and Household and feral moggies could be killing countless native bats | Stuff.co.nz[14].
22. For example, see this September 30th 2022 newspaper report of long-tailed bats attacked by a cat 'Sassy' bat that survived cat attack now flying again | Stuff.co.nz[15] about an injured long-tailed bat found in Te Awamutu (the second bat brought in to Hamilton Zoo for treatment that had been injured by same cat).

> *As for Batwoman, DOC science advisor and vet Kate McInnes said once it had healed sufficiently, it would be released to the rural area outside Hamilton to locate its social group, its own roosts and feeding areas.*
> *"Long-tailed bats are not restricted to native forest remnants and regularly use rural areas for feeding, breeding, roosting, and socialising."*
> *"This is important because bats are strongly faithful to specific roosts and feeding areas. Roosts are rare in this area. They live in close social groups."*

Cumulative effects on long-tailed bats

23. 'Death by a thousand cuts', i.e. the local extinction of long-tailed bats is a likely outcome here, unless what is happening in the wider area is taken into consideration[16]. For example, HCC's PC5 - PSPA and Waipa DC's PPC20 to the west. Their habitat is already scarce in the wider area, and will be further reduced, fragmented and degraded by the urbanisation of the PSPA, which is currently used by bats.
24. A precautionary approach should be used for any developments, including this proposed Plan Change, in the wider area used by bats, as concluded by Moira Pryde in her evidence for the PSPA Plan Change:

> Given the uncertainty of the mitigation methods eg. lighting restrictions, plantings, revegetation, artificial roost boxes and how they will affect the bat population a precautionary approach should be applied.

[13] https://www.stuff.co.nz/national/300658526/serial-bat-killer-cat-uncovered-in-research-on-endangered-pekapeka
[14] https://www.stuff.co.nz/timaru-herald/news/129531081/household-and-feral-moggies-could-be-killing-countless-native-bats
[15] https://www.stuff.co.nz/national/130025495/sassy-bat-that-survived-cat-attack-now-flying-again
[16] https://www.environmentguide.org.nz/rma/principles/section-6-matters-of-national-importance/

This would involve providing additional habitat onsite, keeping as much of current vegetation as possible, improving connectivity of vegetation onsite and proactively carefully considering how this can be applied to the wider landscape.[17]

25. Any local extinction in a species as close to extinction as the long-tailed bat must be avoided.

26. The current situation of a case by case assessment and management of effects on a highly mobile and difficult to study species like the long-tailed bat is unlikely to result in the kind of coordinated range of actions necessary to ensure the survival of the species in this landscape, as 4Sight Consulting have noted in their 2020 report for Project Echo on the Hamilton City Long-Tailed Bat Survey:

> *The development of a nationally accepted framework for studying and developing management strategies would be highly recommended for reducing or mitigating the impact of urban developments on bats.*[18]

Early involvement of expert bat ecologists

27. Specialist bat ecologists need to be involved in Plan Change processes from the earliest stages, before roading and other infrastructure plans are made, in order to protect bat habitat, including commuting flyways and important foraging areas, from destruction, degradation and fragmentation.

Bat Management Plan

28. If bats are detected, any Bat Management Plan needs to be written by a suitably qualified bat ecologist, and approved by a DOC appointed bat ecologist.

Climate Change

29. Protecting and enhancing bat habitat will also contribute to mitigating climate change impacts by retaining the existing mature trees and increasing the number of trees in the Plan Change area, for example by replanting the shelterbelts.

Highly Productive Soils

30. The National Policy Statement on Highly Productive Land 2022 ("NPS-HPL") commenced on 17 October 2022. Clause 4.1 requires every local authority to give effect to the NPS-HPL on and from the commencement date. Clause 3.5(7) says that until a regional policy statement containing maps of highly productive land is operative each territorial authority must apply the NPS-HPL as if references to highly productive land were references to land that, at the commencement date: is zoned rural but is not subject to a **Council** initiated notified plan change to rezone it from general rural to urban.

31. Plan Change 57 was initiated by Calcutta Farms Limited not the Matamata-Piako District Council. Forest & Bird is not aware of the Waikato Regional Policy Statement containing maps showing highly productive land. The Manaaki Whenua Landcare Research interactive maps indicates the plan change is LUC-1 to LUC-3. This means the NPS-HPL,

[17] Department of Conservation Moira Pryde Evidence Bat Ecology 16 Sept 2022, accessed from https://hamilton.govt.nz/property-rates-and-building/district-plan/plan-changes/plan-change-5/ p35
[18] https://waikatoregion.govt.nz/assets/WRC/WRC-2019/Project-Echo-Hamilton-city-survey-2020-report.pdf p10

until the Waikato Regional Policy Statement indicates otherwise, applies, at least to part of the 41 ha of rural zoned land and is to be treated as highly productive land.

32. The NPS-HPL directs that re-zoning, subdivision or development of the highly productive land is to be avoided. Forest & Bird supports this very directive wording.

33. Data indicated that the area of urban and rural residential use on highly productive land has been increasing in the Waikato Region since 2002. PC57 proposes to rezone 41 ha of rural zoned land to General Industrial Zone.

34. The Applicant has concluded that PC57 meets the requirements of the NPS-HPL and re-zoning the rural land to industrial is appropriate in this instance. However, Forest & Bird seek that the Council address highly productive soils in its s42A report.

Submission Points

Submission Point	The Application AND Plan Section/Provision	Decision Sought	Explanation
1	The application	Urgently, and before this proposed Private Plan Change process progresses any further, we request that the applicant is directed to verify the presence or absence of long-tailed bats in the vicinity through employing a qualified bat ecologist to conduct surveys. The bat ecologist employed and survey method used must be approved by a DOC appointed ecologist. If long-tailed bats are found to be present, any land use change must include the preparation of an Ecological Management Plan, so that PC57 does not negatively impact on long-tailed bats being able to persist in this area. This Plan is to be prepared by a suitably qualified ecologist, who must consult with a DOC appointed ecologist, and must also take the wider landscape used by bats into account.	No mention is made of the impacts on biodiversity except in passing: 7.6 Ecological Effects '… it is considered that any adverse ecological effects on the Mangawhero Stream and environs, that arise from the plan change, are acceptable.' The decision sought is needed in order to give effect to the RMA Section 6(c): 'The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna'; and to give effect to the Operative Waikato Regional Policy Statement, Ecosystems and indigenous biodiversity section, Objective 1: '**ECO-O1 – Ecological integrity and indigenous biodiversity** The full range of ecosystem types, their extent and the indigenous biodiversity that those ecosystems can support exist in a healthy and functional state'; and Policy 2 in the same section: '**ECO-P2 – Protect significant indigenous vegetation and significant habitats of indigenous fauna** Significant indigenous vegetation and the significant habitats of indigenous fauna shall be protected by ensuring the characteristics that contribute to its significance are not adversely affected to the extent that the significance of the vegetation or habitat is reduced'; and Method 1: '**ECO-M1 – Maintain or enhance indigenous biodiversity**

			Regional and district plans shall maintain or enhance indigenous biodiversity, including by: 1. providing for positive indigenous biodiversity outcomes when managing activities including subdivision and land use change;' and Method 2: **'ECO-M2 – Adverse effects on indigenous biodiversity** Regional and district plans shall recognise that adverse effects on indigenous biodiversity within terrestrial, freshwater and coastal environments are cumulative and may include: 1. fragmentation and isolation of indigenous ecosystems and habitats; 2. reduction in the extent and quality of indigenous ecosystems and habitats; 3. loss of corridors or connections linking indigenous ecosystems and habitat fragments or between ecosystems and habitats; … 9. loss, damage or disruption to ecological processes, functions and ecological integrity; …. 11. effects which contribute to a cumulative loss or degradation of indigenous habitats and ecosystems; 12. noise, visual and physical disturbance on indigenous species, particularly within the coastal environment; and 13. loss of habitat that supports or provides a key life-cycle function for indigenous species listed as 'Threatened' or 'At Risk' in the New Zealand Threat Classification System lists'

			If this survey is not done urgently, further bat habitat could be lost; and any replacement planting or planting done to screen bat areas from light will have less time to reach the agreed upon height and density.
2	18 General Industrial Zone	The GIZ section must include a statement about the presence or absence of long-tailed bats in the vicinity to be verified through employing a qualified bat ecologist to conduct surveys. The bat ecologist employed and survey method used must be approved by a DOC appointed ecologist. If bats are found to be present, an Ecological Management Plan is to be prepared to protect roosting, foraging and commuting habitat for long-tailed bats and to ensure overall ecological values are enhanced. This Plan is to be prepared as part of this Plan Change process, and by a suitably qualified ecologist, who must consult with a DOC appointed ecologist, and must also take the wider landscape used by bats into account. The EMP should also include recommendations for landscape planting throughout the GIZ area, including specimen, sizing and design requirements to encourage long-tailed bat foraging and/or commuting. The time frame for plantings also needs to be specified, in order that they reach a size functional for bats before any works commence.	Long-tailed bats are critically endangered, as outlined earlier in the submission; and their protection is required by various higher order planning documents as shown in the section above. Suitably qualified long-tailed bat ecologists are the only people with the knowledge to write an Ecological Management Plan which will enable bats to persist in this area. The wider landscape must be taken into account because bats are highly mobile, and use a larger area than covered by this Plan Change. To protect the 'significant habitats of indigenous fauna' the highest priority of the effects management hierarchy is to first avoid any impacts on protected species. Trees, for example, take time to grow to a size where they are useful as bat habitat or to screen bat areas from light, including light from car headlights. Potential 'hop overs' (i.e. areas where existing commuting pathways might cross roads if the area is developed) need to be identified as part of this; and the road placement might need to be changed. 'Hop overs tend to only work

		There also needs to be a requirement for maintaining these plantings over the long-term. Pest control needs to be part of the Ecological Management Plan, covering all the introduced predators of bats: rats, stoats, cats and possums.	when they follow a flight path that the bats already use and so are relatively experimental as a mitigation tool.'[19] Bats are faithful to trees they have used for generations. Trees need to be of a certain size before they are useful to bats for roosting or other functions such as commuting pathways. Appropriate lighting and noise levels to protect long-tailed bats are to be determined by a suitably qualified bat ecologist. Any Ecological Management Plan needs to include: • Avoiding the loss of habitat and connectivity between habitats • Protecting and enhancing long-tailed bat habitat and connectivity between habitats Where avoiding impact is not possible: • mitigate any loss of long-tailed bat habitat and effects on long-tailed bat ecological values by planning for replacement habitat well in advance of any changes Any offsetting or compensation for residual adverse effects on long-tailed bats will increase the area of functional connected habitat within the home range of the population of bats which use the area of the Plan Change. Recourse to this is to be limited to where the earlier steps in the effects management hierarchy have been sequentially exhausted.

[19] Department of Conservation Moira Pryde Evidence Bat Ecology 16 Sept 2022, accessed from https://hamilton.govt.nz/property-rates-and-building/district-plan/plan-changes/plan-change-5/ p30

			Roads bring pests. People and our food waste (lunch scraps etc.) bring pests.
3	Bat Habitat Significant Natural Features / Areas	Urgently begin a bat monitoring programme, with the aim of mapping bat habitat, including commuting corridors, and including this as an overlay on the existing District Plan maps. The monitoring programme should be designed by a suitably qualified ecologist, who must consult with a DOC appointed ecologist, and must also take the wider landscape used by bats into account. Collaboration with other local authorities in the region will lead to the best results, given the large home ranges of bats, and the difficulties of studying this highly mobile and nocturnal species.	Because bats are highly mobile, the current mapping of Significant Natural Features in the District Plan does not provide adequate protection of their habitat. Without information on where bats are in the district, and how the areas they use interconnect both within the district and across the wider landscape, bat habitat (roosting, foraging and commuting) is likely to be destroyed, driving the local population closer to extinction. For example, bat habitat includes foraging areas over pasture, and a line of trees provides an edge along which they can safely fly, and from which they will venture out across pasture to forage.