

Tabbed Document
Cees BEVERS
22/7/2019

**BEFORE THE NEW PLYMOUTH DISTRICT COUNCIL
INDEPENDENT HEARING COMMISSIONERS**

IN THE MATTER OF

The Resource Management Act 1991

AND

IN THE MATTER OF

**Request for Private Plan Change NPDC
PLC18/00048 by Oakura Farm Park Limited
to rezone land at Oakura within the New
Plymouth District**

**SUMMARY OF STATEMENT OF EVIDENCE OF
CORNELIS MARTIN WILLEM FILIP BEVERS**

HIGHLIGHTS OF STATEMENT OF EVIDENCE OF CORNELIS MARTIN WILLEM FILIP BEVERS ON BEHALF OF OAKURA FARM PARK LIMITED

1. I have been a practicing ecologist for 20 years, and currently I work as an ecologist at Landpro Limited.
2. I have prepared a report for the proposed plan change for the subdivision of land at Wairau Road; the "Ecological Values and Impact Assessment: Wairau Stream, Wairau Estate subdivision, Oakura." report dated 26th of July 2017.
3. I have read and reviewed the NPDC Officers Planning Report prepared for Hearings Commissioner 31 May 2019 (NPDC planning report), as well as the supplementary planning report response to expert evidence report 19 July 2019.

SUMMARY OF EVIDENCE

4. Both the central and southern tributaries of the Wairau Stream are of moderate ecological value.
5. There are no threatened species known to be present on site.
6. Potential ecological impacts of the proposed activities can be mitigated by adopting recommendations made in the Ecological Values and Impact Assessment Report.
7. The potential ecological effects of the development of the Oakura Farm Park Ltd. balance area, to be known as "Wairau Estate", carried out in accordance with all mitigation measures and recommendations being adopted, will be no more than minor.

ANALYSIS

Flora

8. The central tributary of the Wairau Stream contains remnant native vegetation and a variety of exotic weed species, which is restricted to the narrow gullies within which it is located, and is surrounded by farmland pasture. The native vegetation is generally of scattered trees and young plants, and wetland plants. Dominant species include mamaku tree fern, mahoe, kamahi, karo, a single rimu, karamu, kawakawa, raupō, flax, cutty grass, pūkio, kiokio fern, and the common rush wiwi.
9. Exotic plants found in, or adjacent to the central tributary of the Wairau Stream include gorse, crack willow, cherry tree, Scotch thistle, convolvulus, woolly nightshade, Tasmanian blackwood, ragwort, an unidentified *Eucalyptus sp.* tree, bamboo, wandering willie, sweetgum, kahili ginger, sycamore, Chilean rhubarb, and inkweed.
10. Significant areas of habitat in the central tributary include several reasonably large raupō beds, in both arms of the stream, and lower down.
11. The southern tributary of the Wairau Stream has a narrow incised channel, and is a fast flowing stream with a rocky bed. This stream is fenced off from farm stock, and has had its riparian edges planted out with native vegetation, with some species having also naturally colonised the area. The species include; akeake, flax, mountain flax, toe toe, pampas, cabbage tree, broadleaf, taupata, koromiko, kohuhu, lemonwood, five-finger, pohutukawa, mamaku, and ribbonwood.
12. Exotic plants found in, or adjacent to the southern tributary of the Wairau Stream include; gorse, montbretia, chilean rhubarb, and brush wattle.

Fauna

13. Native bird species found onsite were pukeko, Australasian harrier, fantail, grey warbler, and kingfisher.
14. It is likely that spotless crane occasionally use the larger raupō beds within the central tributary of the Wairau Stream, as they are known to be present in the northern tributary, only 200m away.
15. Exotic bird species noted were chaffinch, starling, song thrush, greenfinch, goldfinch, and blackbird.
16. The native banded kokopu was detected in the fish spotlight survey throughout the central tributary of the Wairau Stream.
17. Long-finned eel were detected in the southern tributary of the Wairau Stream.

18. No koura, or freshwater crayfish, were detected during the spotlight survey, but these are likely to be present in low numbers, as they have been detected in the northern tributary of the Wairau Stream on the property.
19. No lizards were noted during the site visits, although no specific survey work for them was undertaken. It is likely that the goldstripe gecko are present within the gullies of central and southern tributaries of the Wairau Stream, as they have been recorded on-site in the past near the northern tributary of the Wairau Stream, and in Oakura township.

Summary of conclusions from the Ecological Values and Impact Assessment Report.

20. The central and southern tributaries of the Wairau Stream have existing riparian vegetation and a significant number of raupō beds of good ecological value, which will be enhanced by the proposed planting of native plants within the stream gullies.
21. None of the species seen in the balance area of the property proposed for the "Wairau Estate" development are considered threatened under the New Zealand Threat Classification System.
22. The raupō beds within the tributaries of the Wairau Stream are important habitat for spotless crane.
23. The revegetation plantings proposed provide good opportunities to create important habitat for goldstripe gecko, as well as a significant food source for native birds such as tui and kereru.
24. Control of stormwater run-off from the roading network can be easily achieved in the gully system of the central tributary of the Wairau Stream by the formation of five stormwater retention ponds, with an estimated overcapacity of approximately seven times if 3m high bunds are used.
25. The water retention time of the ponding water behind the bunds is estimated to be of only short a duration of 3 to 5 hours for a 1% AEP storm event, which is unlikely to negatively affect the raupō and flax beds in the gullies.
26. Silt run-off from excavation works can negatively impact streams and wetlands, if left uncontrolled. Silt control measures are easily implemented to mitigate this risk.
27. Clearance of pasture grass, with any associated earthworks in the subdivision is a minor ecological impact.
28. The revegetation plantings and re-grassing will aid in the control of silt laden run-off from earthworks.
29. Domestic cats can have a significant impact on populations of birds, invertebrates, lizards and rodents. Roaming and hunting behaviour in cats is not easily controllable.
30. Domestic cats are already established in the area.
31. Domestic dogs disturb and kill wildlife. The roaming and hunting behaviour of dogs is relatively easily controlled compared to cats.
32. The potential ecological effects of the development of the Oakura Farm Park Ltd. balance area, to be known as "Wairau Estate", carried out in accordance with all mitigation measures and recommendations being adopted, will be no more than minor.

Summary of recommendations from the Ecological Values and Impact Assessment Report.

33. It is recommended that:
34. The raupō beds remain in full sunlight, and are not shaded by any of the revegetation plantings, even when mature.
35. Consideration should also be given to creating large patches of flax and toetoe (greater than approximately 100m²) within the revegetation plantings to provide habitat for native lizards, such as the goldstripe gecko.
36. That the following species are included in revegetation plantings to encourage native birdlife; mountain flax, flax, kowhai, puriri, tawa, kawakawa, pigeonwood, cabbage tree, miro, rewarewa, kahikatea, kohekohe and totara.
37. That the stormwater retention ponds are designed to allow for any excess stormwater to drain away within 24 hours at normal flow rates.
38. That the stormwater retention ponds bunds are no greater in height than 3m, and where stormwater management design allows, are designed to as low a height as practicable, so as to minimise raising the water levels.
39. That any new culverts installed enable effective passage of migratory native fish upstream and downstream, e.g by the use of mussel sprat ropes draped through them.

40. Any areas excavated associated with the proposed development (e.g. roading or stormwater) are re-grassed or built over (e.g. road), as soon as practicable after earthworks are complete.
41. That revegetation planting of the gullies is carried out before house site and roading earthworks are begun.
42. Domestic cats are prohibited in the subdivision.
43. That where lots have a boundary in common to a proposed covenant area, that the common boundary be fully fenced with standard 8-wire post and batten farm fence, or a 5-rail wooden fence, to a height of between 1.1-1.2m, which will effectively control most dogs.
44. The proposed walking track in the esplanade is fenced off from the wetlands using a 8-wire post and batten farm fence, or a 5-rail fence, to a height of between 1.1-1.2m, to effectively control most dogs.
45. Within the esplanade strip all dogs are to be kept on a leash at all times, and that the New Plymouth District Council adds the proposed Wairau Stream Esplanade Strip to the "Leashed control areas for dogs" under the NPDC Dog Control Bylaw 2010.
46. That follow up monitoring of wetland birds, especially spotless crane, is undertaken after the proposed subdivision works and residential development has taken place, and into the future.

Evidence of others and associated opinions

47. I have read the evidence of Mr Andrew Fraser from Red Jacket Limited, and note that he states that the proposed wetland-like stormwater retention ponds system that will be hydraulically neutral. These stormwater ponds will have throttled pipe discharges to ensure predevelopment flows are not exceeded, and therefore will have an effect on the environment that is no more than minor.

Items not included in the Ecological Values and Impact Assessment Report

48. Further consideration of the recommendation to prohibit cats from the subdivision (see 35. (i) above), I note that this may be difficult to implement and enforce with the current District Plan. Anecdotal evidence from the original subdivision by Oakura Farm Park Ltd. "The Paddocks" in 2010 suggests that prohibiting cats by way of caveats registered against all titles is not entirely effective. A bylaw may be able to be passed to prohibit cats in the subdivision, allowing NPDC Animal Control Officers to enforce the bylaw.

Comments on NPDC Officers Planning Report, 31st May 2019.

49. I note that the Planning report states that "The proposal has the potential to maintain and enhance the ecological values of the site and wider area" (p.54).
50. No objections or contradictions to my report are raised in the Officers Planning Report, and it is noted that the report states that potential ecological impacts are addressed by the mitigation measures in my report (p. 55).
51. The Officers Planning Report concludes that adopting the mitigation measures from my report will achieve the objective of the Plan to to sustainably manage, and enhance where practical, indigenous vegetation and habitats. Furthermore, the Officers Planning Report recommends that "the ecological protection and enhancements methods proposed are referenced in the Plan provisions to ensure they are appropriately implemented at the time of subdivision and development" (pp. 55-56).

Comments on Supplementary NPDC Planning Report, 19th July 2019.

52. This report notes that the Landscape Architect for submitters Mr Kensington believes there will be an adverse landscape effect created by the main northern access road into the subdivision off Wairau Road, through the lower leg of the Key Native Ecosystem adjacent to the Northern tributary of the Wairau Stream, and adjacent esplanade strip and walkway. This area of the KNE contains a raupō reed (*Typha orientalis*) bed. From previous work in this area for the "The Paddocks" subdivision, carried out in 2010, I know that spotless crane (*Porzana tabuensis*) use this area. The proposed formed width of the access road is 18m, on top of a potentially 4m high culvert crossing, the earthworks will likely slope to a base 34m wide in the stream (A. Doy *pers. comm.*). I estimate that approximately 275m² of raupō bed will be removed by building the access road, based on the crossing location and the road width.

53. The area of affected raupō bed is relatively small, compared to the overall extent of raupō over both the northern and central tributaries of the Wairau Stream on the property, and unlikely to prove significant loss of spotless crake habitat, given that the spotless crake are likely to use all of the scattered raupō beds from time to time.
54. The removal of the raupō there could potentially be off-set by the creation of further raupō habitat within the stormwater retention ponds being created by creating areas of deeper water by raising the height of the culverts, but also allowing fish passage by the use of mussel sprat ropes. Potentially the greatest opportunity for this exists in the upper reaches of the central tributary in the proposed retention ponds 3, 4 and 5, which are currently grazed and little native vegetation is currently found. Using a conservative estimate of potential area for new raupō beds in these three retention ponds of one fifth (20%) of the potential area of, a total area of additional raupō habitat of approximately 800m² within the stormwater retention areas 3, 4, and 5 combined (Table 1). Raupō rhizomes could be transplanted in winter, when the green stems have died down for the season, and used to establish other raupō beds in the stormwater retention ponds where some areas of standing are able to be created.
55. It is likely that spotless crake will use the new raupō beds once established within the stormwater retention areas, as they are known to disperse between small scattered wetlands at night.
56. With this scenario, there would be a nett gain of 527.56m² of raupō bed.

Table 1: Potential new raupō bed area within stormwater retention areas

Retention area	Area (m ²)*	1/5 area raupō (m ²)
3	636.88	127.38
4	2,027.85	405.57
5	1,348.03	269.61
Total	4,012.76	802.56

*= from McKinlay Surveyors Stormwater Retention Areas drawings SW01 15/05/2017, and associated Cut/Fill Report 15/05/2017.

Conclusions

57. The potential ecological effects of the development of "Wairau Estate", carried out in accordance with all mitigation measures and recommendations being adopted, will be no more than minor.
58. The ecological protection and enhancement methods proposed will provide positive ecological effects in terms of increasing the area of habitat, increasing biodiversity, and increasing native animal populations sizes.