IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of the Proposed Porirua District Plan – Hearing Stream 2

Statement Of Evidence of Graeme La Cock on Behalf of The Director-General of Conservation

15 October 2021

Department of Conservation
P O Box 10 420, WELLINGTON 6011

Counsel acting: K Anton / R Broad
Tel: 027 427 5900 / 027 298 3268
Email: kanton@doc.govt.nz / rbroad@doc.govt.nz

INTRODUCTION

1. My full name is Graeme Dennis La Cock.

2. I have been employed at the Department of Conservation (DOC) for 24 years.

3. I have held my current role as a Technical Advisor Ecology for the past nine years. Previously I was a Technical Support Officer (Flora) in DOC's Tongariro Whanganui Taranaki Conservancy for 15 years.

4. Before working for DOC I worked in South Africa for 10 years as a scientist for a conservation agency, and for four years as a technician with an ornithological institute, concentrating on seabird research.

5. I have a BSc, BSc Honours and MSc from Rhodes University, South Africa, and am a trustee of the Coastal Restoration Trust of New Zealand. I have authored or co-authored 20 publications in peer-reviewed scientific journals.

6. I have presented evidence on several regional and district plans and regional pest management strategies, and have participated as an expert witness in Environment Court mediation. I have also provided technical advice for DOC on resource consent applications, including several in the Porirua District.

7. Although this evidence is not prepared for an Environment Court hearing, I confirm that I have read and comply with the Code of Conduct for Expert Witnesses (set out in the Environment Court's Consolidated Practice Note, 2014).

8. This evidence is within my area of expertise, except where I state that I am relying on what I have been told by another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

SCOPE OF EVIDENCE

9. I have been asked to give evidence concerning indigenous vegetation in the Porirua District as it relates to the Proposed Porirua District Plan (PPDP), including:

    a) the identification of significant natural areas (SNAs);

    b) management of indigenous vegetation in areas that have not been identified as SNAs;

    c) Identification of weeds.

SNAs

10. I commend Wildlands for the thoroughness of their process in identifying SNAs, and the follow-up to queries from landowners of SNAs. However, SNAs remain a snapshot in time, based on the best information at the time. This is pragmatic and understandable. However, situations change, which may impact the assessment criteria for an SNA.

11. In his evidence Mr Goldwater refers to several disputed SNAs that could not be visited because they were denied or failed to obtain access. His maps of SNAs, particularly pages 46, 47 and 53, clearly indicate surrounding or nearby vegetation which appears similar to that of the SNA, but which does not meet the criteria for inclusion.

12. Rarity and distinctiveness is one of the standard measures when assessing ecological site significance. The methodology for the PPDP (Wildlands 2018) refers to a 2013 series of publications by DOCA subsequent series was published around 2018, the next should be in 2022. These four to five yearly reviews are coordinated by DOC, and involve a panel of experts assessing the conservation or threat status of biota following a standard procedure (Townsend et al 2008). In the case of vascular plants, the expert panel identified 61 taxa as being at greater risk of extinction in 2017 (de Lange et al. 2018) compared to 2012 (de Lange et al. 2013), based on loss of populations, decreasing population sizes, or increased threat.

13. There is no indication the more recent 2018 series of publications was used as a basis for assessing Significant Natural Areas in the PDP. Nonetheless, I've used the example of plants to demonstrate that the

conservation status of biota does change, and likely will change during the life of the PPDP.

14. Not all indigenous vegetation is included in an SNA or ONFL, as clearly indicated in Mr Goldwater's evidence. He has suggested there should be a limit on the amount of exotic vegetation that can be removed from an SNA, because of potential disruption to sequences, mosaics or ecosystem function and fragmentation or loss of buffering or connectivity within the SNA and between other indigenous habitats and sequences.

15. I believe that indigenous vegetation outside an SNA plays a similar role in buffering and providing connectivity between SNAs and other tracts of vegetation. It adds to the natural fabric of the district, and supports its ecological functioning.

16. In his evidence Mr Silva proposes a limit of 250 m^2 for the permitted clearance of indigenous vegetation outside identified SNAs, ONFLs, ONLs, SALs and the coastal environment high natural character areas. In my opinion, that threshold would mean there is a reasonable safeguard against the inadvertent clearance of significant indigenous vegetation. It would mean there is an opportunity to assess the effects of clearing larger areas of indigenous vegetation which may not have met the criteria for significance, but nevertheless contribute to the maintenance of biological diversity in the district.

17. In the past decade there's been a groundswell of community involvement in conservation:

    - Just about every town or suburb in the district has a predator-free group.
    - Community groups and your Council are putting a tremendous effort into rehabilitation planting on public and private land, including sites such as Pāuatahanui Inlet and Porirua Harbour. Mana Island goes back even further, and serves as a good example of how plantings can add value over time.
    - New developments, such as the Adventure Park, have undertaken to do mitigation plantings and to establish a predator trapping network.

18. These efforts will lead to a spread of threatened and non-threatened fauna species into protected and unprotected areas, and to an increase in habitat

to serve as refuges or corridors for these animals. Coastal dune plantings will most likely include pīngao, whose conservation status of At Risk-Declining would warrant inclusion of an area as an SNA in terms of rarity and distinctiveness.

19. In addition, the methodology (Wildlands 2018) referred to "All ecological sites or part of these sites within the Transmission Gully Highway designation were removed or had boundary adjustments, regardless of the underlying vegetation status". It further stated that, should they not be impacted as part of the highway construction, they can be considered for inclusion in a future Ecological Sites review. Transmission Gully is finally nearing completion, so I believe such an assessment is warranted, as it may result in further SNAs being identified.

20. Nonetheless, having studied the methodology, maps of SNAs and other environmental layers, I believe that the methods applied have largely identified areas that currently qualify as SNAs.

21. I believe I've demonstrated that situations change, and that indigenous areas not in SNAs can play a role in the ecological functioning of the Porirua District. I've also raised the importance of benefits resulting from conservation actions by community groups and Council, and as result of undertakings associated with RMA conditions.

ECO-R2. IDENTIFICATION OF WEEDS and FS 39.35 DEFINITION OF PEST

22. In his Section 42A report McDonnell accepted the advice of Wildlands as outlined in their expert evidence to include pest plants listed in Howell (2008) *Consolidated List of Environmental Weeds in New Zealand.*

23. Since its publication in 2008 there have been two significant publications on additional weeds in New Zealand (Ogle and La Cock 2019; Ogle et al. 2021), and our understanding of weeds, their impacts and their distribution has improved.

24. Howell (pers. comm) is currently reviewing the 2008 list, and he'll be considering these two publications in his review. He indicated that there will be around 100 new weeds on the list, while 20 on the 2008 list will be removed.

25. In my opinion it would be preferable to provide for the updated version of Howell's list to apply when it is published. This would capture new weeds that are not in Howell (2008), such as *Phragmites karka*, which is currently known from several sites between the Whangaehu River and Waitarere. A herbarium specimen from the Makino River in Feilding includes the following description "On stream banks and in open areas of disturbed forest edges. Dense stands of reeds to 5 m tall, sprouting readily from uprooted rhizomes and stolons. Hundreds of square metres of reeds." Clearly it's something to be concerned about should it become established in the Porirua District. It's not listed in Howell (2008). I am not predicting it will establish in the Porirua district, I have just used it as an example of weeds that have caused concern recently.

Graeme La Cock

15 October 2021

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