

## **Submission by Dr Tim Curran to hearing on Plan Change 31**

1. My name is Timothy John Curran.
2. I hold a PhD in Botany from the University of New England, Australia, and a BSc (Hons) from the University of New South Wales, Sydney.
3. I am an Associate Professor of Ecology at Lincoln University, where I have worked as an academic for the last 12 years. I have a total of 17 years experience lecturing in terrestrial ecology and natural resource management to university students in New Zealand and Australia, and 22 years experience conducting research in ecology, primarily focussing on plant species responses to disturbance.
4. These are my expert credentials, though I am appearing today as a submitter on the original proposal.
5. I appear today to oppose Plan Change 31 (PC31) on the basis that rezoning this land for urban development is not a sustainable use of this land, as it would result in the substantial loss of finite natural resources, namely highly productive land.
6. The evidence regarding the loss of highly productive land will largely be provided by Associate Professor Peter Almond, an expert in soil science.
7. The Resource Management Act 1991 states (s7) that 'In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to ... (s7g) any finite characteristics of natural and physical resources.' Highly productive land is one such finite natural resource.

### **Cumulative Loss of Highly Productive Land**

8. There have been several studies documenting the loss of highly productive land throughout New Zealand. For instance, the report 'Our Land 2021' (MfE and Stats NZ 2021) identified that between 2002 and 2019 there was a 54% increase in the amount of highly productive land made unavailable to agriculture because it had a house on it. For instance, Figure 2 of that report (reproduced in part below as Figure 1 of my evidence), identifies the area of Southwest Christchurch as one of six key areas nationwide where highly productive land has been lost to urban development from 1996 to 2018.
9. I now refer to A/Prof Peter Almond for his expert advice on the impact of PC-31 on highly productive land.

Signed: Dr Tim Curran

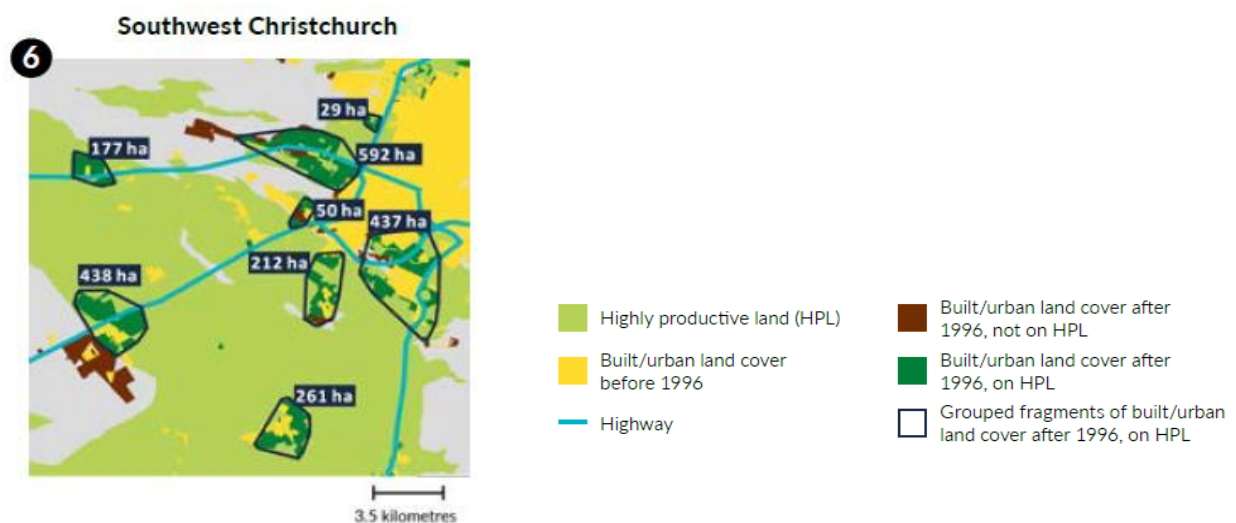


21 July 2023

## References

Ministry for the Environment & Stats NZ (2021). *New Zealand's Environmental Reporting Series: Our land 2021*. Available from [environment.govt.nz](https://environment.govt.nz) and [www.stats.govt.nz](https://www.stats.govt.nz).

Figure



The squares highlight where the highest proportion of highly productive land was converted to urban land cover for 1996–2018, shown in dark green. Black lines enclose fragments of converted highly productive land that are within 1 kilometre of each other, with the total area of converted fragments shown in hectares. Only areas totalling 20 hectares or more are outlined and labelled.

This graphic was created using Manaaki Whenua – Landcare Research LCDBv5.0 and NZLRI Land Use Capability layers. Built and urban areas are categorised as a built-up area (settlement) or urban parkland/open space in the LCDBv5.0. Highly productive land is in land use capability categories 1–3.

**Figure 1.** Map showing the loss of highly productive land lost to housing in the period 1996-2018. Map extracted from MfE and Stats NZ (2021) *New Zealand's Environmental Reporting Series: Our Land 2021*.