

27 April 2021

Mr Simon Upton  
Parliamentary Commissioner for the Environment  
pce@pce.parliament.nz

Private Bag 63002  
Wellington 6140, New Zealand

Level 10, Grant Thornton House  
215 Lambton Quay  
Wellington 6011, New Zealand

CC. Dr Geoffroy Lamarche (Chief Science Advisor, PCE).

epa.govt.nz  
+64 4 916 2426

NZBN: 9429041901977

Dear Simon

I am writing to commend and support your report: A review of the funding and prioritisation of environmental research in New Zealand.

This report, and your previous work on environmental reporting, clearly articulate the problems of fragmentation of funding, the lack of coordination and connection between providers, and the difficulties with researching longer-term challenges. As you note in your overview, environmental data is not collected in a consistent manner and environmental reporting effectively relies on cobbling together what we have to hand. It is far from an ideal situation.

For the EPA, we need good environmental data that can support our work. Without good environmental data good decision making is difficult. There are significant data gaps such as the environmental fate of chemicals in soil and water, how the cumulative use of chemicals is affecting long-term soil productivity, the collection of chemicals in ground water data in a systematic way across Aotearoa New Zealand. There is also a need for research to 'front-foot' technologies that need to be considered through an environmental impact lens, for example, RNA-based pesticides.

We also need good, often long-term, data to allow us to measure the efficacy of our decisions, and if they need to be revisited.

As you know, we are progressing work on developing a chemical map, one objective of which is to allow a better understanding of where and the extent of chemical use in Aotearoa New Zealand. We are progressing this work because of a data gap. It would be good to coordinate this project within a cohesive environmental research framework.

Likewise, we are actively exploring how we might use environmental DNA (eDNA) tools to look more holistically at biological communities (from microbes to mammals), and how the chemicals and ecosystems that we regulate impact upon ecological networks. We advocate that eDNA will help to defragment environmental data, while also having a deterrent effect when samples are taken routinely in a monitoring setting.

We are supportive of your recommendations that there is a regularly updated environmental research strategy, and that funding for environmental research should link to the strategy. We

strongly agree that the environmental research strategy should take into account the current, medium and long-term issues that are preoccupying those who seek to manage Aotearoa New Zealand's environment and should link to the priorities the Government articulates. We particularly note your statement: New Zealanders are entitled to know that the environmental research they fund is focussed on addressing the most important challenges we face.

The EPA uses, collates and scrutinises research data from across the world when making our decisions. However, we have little ability or resources to commission research that we feel is needed. The set-up of an environmental research council, or similar, would enable organisations like the EPA to submit priority areas that might better attract research providers and longer-term environmental monitoring programmes.

We are aware that the Government is turning its attention to the future direction of research, science and innovation in Aotearoa New Zealand. Your report will make an excellent and timely contribution to this discussion. If we can lend a voice to your proposal or provide exemplars of how the EPA might interact with an environment research council then please let us know.

Yours sincerely

A handwritten signature in green ink, appearing to read 'Allan Freeth', followed by a period.

Allan Freeth  
Chief Executive