

BEFORE THE

Canterbury Regional
Council

IN THE MATTER OF

the Environment Canterbury
(Temporary Commissioners
and Improved Water
Management) Act 2010

AND

IN THE MATTER OF

Submission on Proposed
Canterbury Land and Water
Regional Plan (2012)

**Section 42A Report Volume 2 – Proposed Canterbury Land and Water Regional
Plan**

Proposed Rules 5.23 and 5.24 – Aerial discharge of vertebrate toxic agents

STATEMENT ON BEHALF OF:

COMBINED CANTERBURY PROVINCES, FEDERATED FARMERS OF NEW ZEALAND

FEDERATED FARMERS OF NEW ZEALAND HIGH COUNTRY

Submitter Numbers 320, 293

Introduction

1. My name is Michael Robert Bennett. I am a Regional Policy Advisor at Federated Farmers NZ (Inc). I hold a B.Sc degree from the University of Canterbury (Ecology) and a Masters of Commerce (Agriculture) from Lincoln University. I have five years of experience as a policy and advocacy planner, with a primary focus on rural issues.

Reference to the submissions and hearing evidence of the Department of Conservation and the Animal Health Board

2. Our statement is also intended to support the submissions and hearing evidence of the Department of Conservation and the Animal Health Board. Specific areas of support include submissions and supporting information on:
 - Control of the aerial application of vertebrate toxic agents through a permitted activity rule;
 - The importance of the aerial application of vertebrate toxic agents as a tool for controlling rabbits, possums, Bennett's wallabies and rodents over large areas, in rugged, difficult terrain, at high densities and/or where a rapid knockdown of pest numbers is required.
 - Laboratory and field studies of breakdown of 1080 and pindone in aquatic environments;
 - Low level of risks to non-target species;
 - EPA and HSNO Act controls on use of vertebrate toxic agents.

Acknowledgement

3. Federated Farmers acknowledges the vision and effort of the Environment Canterbury staff and Commissioners in producing the Proposed Land and Water Regional Plan within a very short timeframe. In this statement we seek to be constructive and to assist with the provision of supporting material to further understanding of the social, economic and environmental effects of the Proposed Canterbury Land and Water Regional Plan (pLWRP). We ask the hearing panel to be mindful that the pLWRP is, despite the best efforts imperfect and that our discussion necessarily focuses on these imperfections.

Accompanying supporting evidence

4. Several pieces of information accompany this statement of evidence, they include:
 - Canterbury Regional Pest Management Strategy 2011 – 2013;¹
 - Evaluating the use of 1080: Predators, poisons and silent forests;²
 - Copy of discharge permit to apply 1080 and pindone throughout Canterbury³;
 - Application for Resource Consents and Assessment of Effects on the Environment. 1080 Application for Pest Control within the Canterbury Region. ⁴

¹ Canterbury Regional Pest Management Strategy 2011-2015 [Online] – <http://ecan.govt.nz/publications/Pages/regional-pest-management-strategy.aspx>

² Evaluating the use of 1080: Predators, poisons and silent forests. June 2011. Parliamentary Commissioner for the Environment. [Online] www.pce.parliament.nz

³ Permit to discharge contaminants (1080 and pindone) throughout Canterbury. Appended.

⁴ Application for Resource Consents and Assessment of Effects on the Environment. 1080 Application for Pest Control within the Canterbury Region. Submitted to Environment Canterbury. March 2009. Appended.

The aerial application of vertebrate toxic agents

5. Federated Farmers are concerned about staff recommended changes to Rule 5.23 which controls the aerial application of vertebrate toxic agents (VTAs).
6. Proposed Rule 5.23 makes the aerial application of VTAs subject to a controlled activity. In submissions Federated Farmers supported this approach and sought that the Council:

Retain Rules 5.21, 5.2.2, 5.23, and 5.24 as notified, particularly the words of the non-notification clause in Rule 5.23.

7. Federated Farmers did not make a further submission on the submission of the Department of Conservation who sought permitted activity status for Rule 5.23. Our position as to whether the aerial application of VTAs should be administered through a permitted activity or not is neutral; on one hand it is not appropriate to unnecessarily complicate the important and time-critical task of applying VTAs to manage pest outbreaks, on the other hand a controlled activity will ensure that adjacent landowners are notified of the activity so they are able to coordinate their own operations.
8. Despite our neutral position, and in light of the benefits of the activity, temporary or non-existent adverse effects on surface water, and other controls, including the HSNO Act and the Canterbury Regional Pest Management Strategy (RPMS)⁵, Federated Farmers supports the position of the Department of Conservation and the Animal Health Board in seeking the minimum practicable level of regulation for aerial application of VTAs.
9. Federated Farmers notes that it is impractical to apply substances from the air and comply with 20 metre setbacks from all surface water, particularly when the terrain is covered by forest or scrub, when pests shelter in areas of vegetation retained in riparian zones, or when slope is significant (and planes have to fly across contour for safety reasons). This means that Rule 5.23 could not be complied with in most circumstances with the staff recommended changes, and the aerial application of VTAs will in most instances be administered as a discretionary activity.
10. The overall concern and our reason for directly supporting the submissions of the Department of Conservation and the Animal Health Board is that an activity status more stringent than 'controlled', is completely inappropriate for the aerial application of VTAs. Apart from having little if any observable adverse effect on surface water or aquatic ecosystems, the aerial application of VTAs is essential, both to prevent damage to forest, and hill and high country land environments, and to safeguard the livelihoods of pastoral farmers. Furthermore, aerial drops of VTAs are often undertaken in response to an outbreak or infestation by large numbers of pests, and once the need for an operation is determined it must be allowed to take place as quickly as possible, which means only the simplest type of resource consent (if any) is appropriate.

⁵ Canterbury Regional Pest Management Strategy. *ibid*

Adverse effects and management of possums

11. The RPMS includes the following comments on the adverse effects of possums:

Possums are one of the most serious threats to biodiversity values. Possums are primarily herbivores, and feed on a variety of leaves, flower buds, fruit, ferns, and fungi. They feed also on invertebrates and opportunistically on the eggs and nestlings of birds. As a result a very large range of both indigenous and introduced flora and fauna are affected.

Despite this wide range, possums are strongly selective browsers and the majority of the diet in any one location consists of only a few species. The species most common in a habitat are not necessarily those most frequently eaten. Therefore, extensive defoliation of favoured plant species and progressive change in forest composition to less favoured species occurs.

Possum damage is not however uniform across habitats. Possum damage appears to be variable within and between plant populations, communities and ecosystems, and is influenced by a range of biotic and abiotic (living and non-living) factors. These factors may predispose plant communities to possum damage, trigger damage episodes, or accelerate the rate of vegetation change. Within forest communities, possum browsing is frequently concentrated on a few trees that may be defoliated or killed, while neighbouring trees may be unaffected. At a regional scale plant species such as mistletoe or fuchsia can coexist with long-established possum populations, while other populations of the same species can be threatened with extinction. Possums can also impact on native animals both by predation of insect species, snails, and birds, although within Canterbury insects are most likely to be at risk.

Possums cause economic effects by damaging exotic forests, eating pasture, and through the spread of bovine Tb. Clover and pasture grasses were a major component of possum diet in a study of possum feeding on Banks Peninsula, apart from summer dry periods. However, the possum browsing on pasture is likely to be a minor problem apart from pasture/bush margins, and is likely to be accommodated within the normal biological response rates of those systems. It may be more significant in areas such as parts of Banks Peninsula where the bush/pasture interface is a major feature. The damage to exotic forests also tends to be limited.⁶

Federated sees the following as particularly significant:

Bovine Tb is the major economic impact associated with possums. There is evidence to support the link between possums and Tb in farmed animals. Recent studies show that cattle and deer may lick and nuzzle Tb infected possums in the terminal stages of the disease as the possums wander around open ground in daylight. Sheep do not appear to exhibit this level of curiosity, and to date have remained relatively free of the disease.⁷

In other words possums are both a serious threat to biodiversity and to the sustainable farming of deer and cattle near forested areas that can support possum populations.

12. A recent report by the Parliamentary Commissioner for the Environment⁸ found that:

- possums, rats, and stoats all need to be effectively controlled to arrest the rapid decline of our special birds and unique species;
- a pest control method is required that can achieve rapid knock down of sudden increases in predators during mast years;
- viability in terms of costs is a huge challenge for effective predator control, aerial application of VTAs is by far the cheapest method of control, and the only realistic method of control in more remote areas or in rugged terrain;

⁶ Canterbury Regional Pest Management Strategy. *ibid*

⁷ Canterbury Regional Pest Management Strategy. *ibid*

⁸ Evaluating the use of 1080: Predators, poisons and silent forests. *ibid*

- 1080 breaks down very quickly in water under field conditions;
- No effect on fish or aquatic insects has been found in field studies where 1080 was deliberately introduced to replicate *the highest number of baits found previously in small streams following 1080 applications.*

The PCE report also identified that even though the presence of 1080 baits in the environment pose *very little risk to people* and that *any residues remain in the environment for a very short length of time*, that the application of 1080 around water bodies is subject to the provisions of the Health Act which prohibits the contamination of any drinking water supply.

13. In forming her recommendations the Commissioner identified that⁹ :

The labyrinth of laws, rules and regulations that govern 1080 and other poisons used to control introduced pests create unnecessary complexity and confusion.

and...

There is a strong case for the use of 1080 and other poisons to be permitted activities under the RMA, with local control reserved to those activities that are not covered by already existing controls under other legislation.

Adverse effects and management of rabbits

14. The RPMS also includes information on the adverse effects of rabbits:

In areas of high and extremely rabbit-prone land, population increase is not curbed by natural mechanisms and can quickly build to high levels. These areas occur largely in the Upper Waitaki Valley, Mackenzie Basin and the inland Kaikoura area. Moderately rabbit-prone land is an intermediate case, although in some situations rabbits can increase to high numbers. These lands occur mainly in the free-draining hill soil areas of North Canterbury and the foothills.

Rabbits can cause a number of adverse effects particularly in the more rabbit-prone lands. At high numbers the control costs can be prohibitively expensive. Their impact reduces available grazing for domestic stock and subsequently decreases the financial returns to landowners and their ability to fund control. High rabbit numbers also assist in maintaining high predator numbers. This can lead to significant costs being incurred in situations where predators carry bovine tuberculosis.

On highly rabbit-prone land, and to a lesser extent on moderately prone land, rabbits, often in conjunction with other grazing animals, cause a number of environmental effects, including:

- (i) the depletion of many plant communities and species diversity;*
- (ii) an increase in areas of bare ground as well as physical disturbance of the soil, both of which increase the risk of erosion;*
- (iii) a reduction in soil organic matter through overgrazing, which, in turn, results in deterioration in the physical and nutrient properties of the soil;*
- (iv) adverse effects on indigenous and other fauna, when rabbit predators target alternative prey.¹⁰*

In other words, rabbits can be very damaging to hill and high country land environments, and devastating to the economic and social wellbeing of hill and high country farmers. To prevent unacceptable environmental and economic effects, wide scale poisoning must be resorted to if rabbit numbers become unmanageable by secondary methods (shooting and poisoning).

⁹ Evaluating the use of 1080: Predators, poisons and silent forests. Ibid p68

¹⁰ Canterbury Regional Pest Management Strategy. ibid

15. The RPMS also includes requirements that directly relate to the use of VTAs to control rabbits, including:

7.4.3 Objective

Over the duration of the Strategy, achieve rabbit densities not exceeding Level 3 on the Modified McLean Scale within the Canterbury region.

7.4.4 Principal measures to achieve the objective

The following principal measures will be undertaken.

(a) Land occupiers are responsible for controlling rabbits on the land they occupy apart from the rating pool area of the Banks Peninsula Pest District.

(h) Environment Canterbury will monitor the use of 1080 poison by requiring notification to Environment Canterbury of its use to control rabbits.

7.4.5 Strategy Rules for rabbits

(a) Land occupiers shall keep rabbit densities on the land that they occupy at or below Level 3 on the Modified McLean Scale.

(c) Land occupiers shall not use or allow the use of aerially-applied sodium monoflouroacetate (1080 poison) on the land that they occupy where aerially-applied sodium monoflouroacetate (1080 poison) has been used on that land within the previous three years.

(d) Land occupiers shall keep, and make available to Environment Canterbury upon request, records in writing of the use of ground-applied sodium monoflouroacetate (1080 poison) for rabbit control on the land that they occupy, recording:

(i) the location of the land on which 1080 poison was applied;

(ii) the date 1080 poison was applied;

(iii) the quantity of 1080 poison that was used ; and

(iv) the type of bait that was used.

A breach of any of these rules creates an offence under Section 154(r) of the Biosecurity Act 1993 and may initiate the regulatory procedures set out in Chapter 12.

Explanation

The purpose of these rules is to provide a defined level at which landowners must carry out rabbit control, to prevent human interference with designated shooting programmes and to ensure that 1080 poison is used in a manner that does not lead to poison aversion in rabbit populations.¹¹

16. To comply with provisions of the RPMS, farmers in rabbit prone areas will require a tool to address population increases beyond the level that can be contained by 'secondary' control methods such as shooting and trapping.

Global consent

17. Federated Farmers sees it as notable that Environment Canterbury staff charged with implementing the RPMS have applied for a global consent¹² to apply 1080 from the air. Farmers are able to operate under this consent with the permission of Biosecurity staff at Environment Canterbury. This measure appears to have been necessary because the planning framework of the day did not provide enough freedom to use 1080

¹¹ Canterbury Regional Pest Management Strategy. *ibid*

¹² Permit to discharge contaminants (1080 and pindone) throughout Canterbury. *ibid*

effectively. The consent is due to expire in 2014 and will no longer be available unless it is renewed or the amended planning framework renders it unnecessary. A copy of the global consent and the AEE used during application¹³ accompany this statement of evidence.

Decision sought – Aerial application of vertebrate toxic agents

18. Federated Farmers opposes the recommendation of the 42A report to remove the exception of rivers less the 3 metres in width, which effectively makes most aerial application of VTAs a discretionary activity.
19. Federated Farmers supports the statements and hearing evidence of the Department of Conservation and the Animal Health Board that aerial application of vertebrate control agents be administered through proposed Rule 5.23 as a permitted activity, reflecting the social, economic and environmental importance of the activity, and minimal or nil risk to aquatic ecosystems. A controlled activity is probably not necessary given the other controls on aerial application of 1080.
20. If controlled activity status is to be retained for proposed Rule 5.23, Federated Farmers seeks that the hearing panel recommends the rule remains as notified because the staff recommended changes effectively amount to discretionary activity status, which is not at all appropriate given what is know about VTAs, and 1080 in particular.

¹³ Application for Resource Consents and Assessment of Effects on the Environment. 1080 Application for Pest Control within the Canterbury Region. *ibid*