

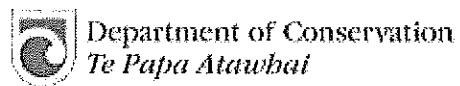


Source: Waikato Times

Region-wide resource consents for aerial use of 1080 in the Waikato Region

CONSULTATION DOCUMENT

May 2015



Your feedback is wanted

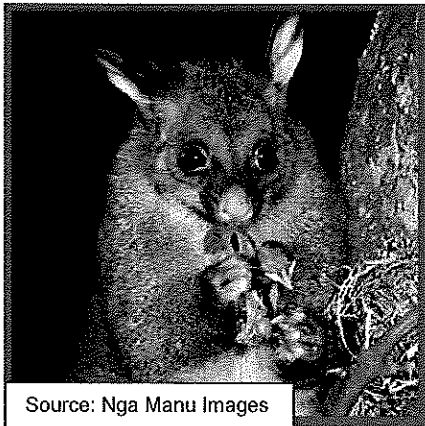
TBfree New Zealand Limited (TBfree), the Department of Conservation (DOC) and the Waikato Regional Council (WRC), through a joint partnership approach, want to make animal pest control in the Waikato region more efficient and less expensive to implement. The partners are preparing joint region-wide resource consent applications for the continued use of aerial 1080. Having these consents will help protect the regions' farming community and the integrity of our native ecosystems.

The partners intend to lodge the consents in December 2015 and want to consult with your organisation as an affected or interested party prior to the applications being made. We would like your feedback on this proposal by 5pm on Wednesday September 30, 2015.

What's proposed and why are the consents needed?

A resource consent to aerially discharge 1080 into the environment is required under the current *Waikato Regional Plan*. In some regions of New Zealand it is a permitted activity and does not require a resource consent.

There are currently three region-wide aerial 1080 resource consents. They all expire in June 2016. The partners are applying for region-wide resource consents for a 35 year period. Although each partner will have their own separate consent they will be processed together to reduce costs and avoid duplication of effort. One joint application is being made to streamline processes and reduce



costs, continuing the long-standing, collaborative approach by the partners to pest management in the region.

The consents will allow the continued use of 1080 as a tool for pest management in the Waikato region. New consents will not change the existing requirements for consultation about individual operations, for getting permission from landowners for 1080 use on their land, or for seeking Medical Officer of Health approval for each operation.

Without continued knockdown of introduced pest animals (e.g. possums, rats, stoats, ferrets, rabbits and wallabies), the Waikato region is at risk of outbreaks of bovine TB and loss of treasured biodiversity values. Control of pest animals has enormous conservation and biodiversity benefits for native flora and fauna. Possums can destroy forest canopies and, along with rats and stoats, are major predators of forest birds, preying on eggs, chicks and adults. Populations of these introduced pests decline dramatically following 1080 operations.

Bovine TB is a highly infectious disease that affects domestic cattle and deer herds. It is an important economic and export issue for New Zealand and the Waikato region. Overseas markets may refuse to take products from areas that have bovine TB or have a history of it.

Aerial 1080 is currently the most cost-effective and efficient method of providing 'landscape-scale' pest control over steep and rugged terrain, making best use of taxpayer and ratepayer funding.

Benefits of long term consents

Under one set of 35 year consents the partners will not have to apply and pay for a new resource consent every time an aerial 1080 operation is to be carried out. Safeguards will continue to involve standard conditions that apply to all operations to protect the environment and human health. Having a single, comprehensive consent will allow for more efficient control of pest animals in the region. Funders of the work will see money saved and the partners will be able to do a better job of pest animal control.

The 35 year consent term will enable better long term planning and co-ordination of aerial operations and allow the three agencies to progress towards their respective long term disease management or biodiversity objectives for the region.

Aerial 1080 delivers many conservation and biodiversity benefits and is effective against a number of pest animals controlled by WRC and DOC, as identified in the Council's 10 year Long Term Plan, the Waikato Regional Pest Management Plan 2014-2024 and the Waikato Conservation Management Strategy 2014-2024.

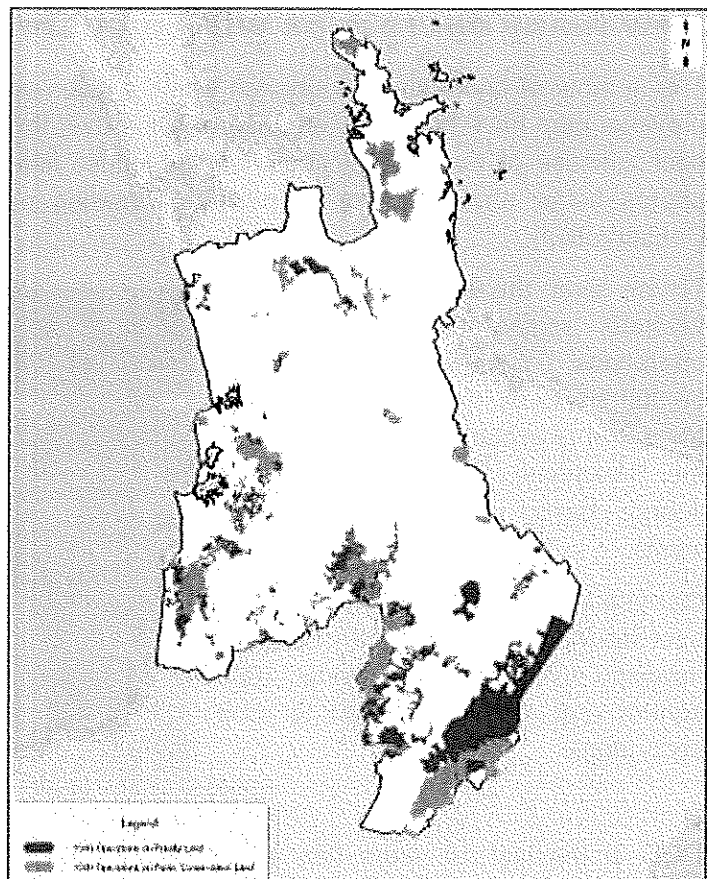
TBfree's mission is to eradicate bovine TB from at least 2.5 million hectares throughout New Zealand (including 466,000 hectares within the Waikato region) by 2026 and to ensure that areas that are already free from TB remain that way. The aerial use of 1080 is a critical tool in achieving this goal.

Resource consents can be a significant cost. Longer term consents will help reduce costs and increase funding available for pest animal operations.

Where will aerial 1080 operations occur?

The map opposite shows the areas where aerial 1080 operations have been undertaken for TBfree, DOC and WRC in the last 10 years.

Having region-wide resource consents will provide flexibility to control pest animals as and where needed. For example, disease outbreaks or the discovery of new threatened species populations may require us to work in new places. Where operations take place on private land, the existing requirement of obtaining permission from private landowners for each operation will continue.



Why aerial application?

There are a range of methods and toxins used for pest control and aerially applied 1080 plays a very important role in the pest management toolbox. Aerial application of 1080 is only one of the pest control methods that will be used by the three agencies. Ground control operations will continue to make up the bulk of control now and into the future.

Aerial 1080 is used because:

- It is safe when applied in accordance with the strict rules and regulations around its storage, handling and use,
- It is very effective in controlling introduced pests (e.g. killing possums, rats and ferrets/stoats in one operation, some of which are also vectors for bovine TB) and it is well suited to New Zealand conditions
- It is cost efficient, being between 2 to 5 times cheaper than ground control in remote and large forested areas
- There are clear benefits to native species (e.g. birds, fish and invertebrates) through aerial 1080 operations, particularly forest species and also native fauna, and
- Operations are well managed, carefully planned and carried out by teams of highly trained and qualified staff/contractors.

How many operations will be undertaken?

The number of operations undertaken within a given year varies. Most of the areas shown on the previous map have been treated once or twice over the last 10 years, with control being driven by pest, disease or ecosystem trigger and response levels. The before and after possum control photos below show the impact possum browsing has on kohekohe (Source: Department of Conservation).

TBfree over the last 5 years in the Waikato region has averaged 6 operations, covering an average 50,000 hectares each year. This rate of control is expected to continue over the immediate future (the next 10 years) based on current disease levels.

Disease levels are expected to decline over the next 15 years and when that happens the amount of aerial 1080 control required is expected to drop accordingly.



DOC in the last 10 years has averaged two operations annually, treating on average 8,600 hectares a year.

Waikato Regional Council's aerial 1080 programme (carried out under the Priority Pest Control Areas programme) is smaller than TBfree and DOC. Council averages 1-2 operations per year on private land with the landowners support and permission.

When do operations take place?

Operations are typically cyclic and implemented when pest levels get too high for conservation or disease purposes. Management outcomes or pest densities are often measured at regular intervals so that planning for operations can begin. For example, DOC has started to treat some sites, with important biodiversity values on a three yearly cycle after finding pest populations rising to dangerous levels only three years after a 1080 operation (see Tongariro Forest case study). More typically, operations have been repeated every 5-7 years.

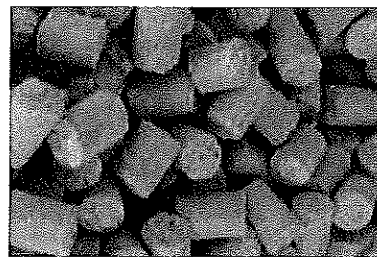
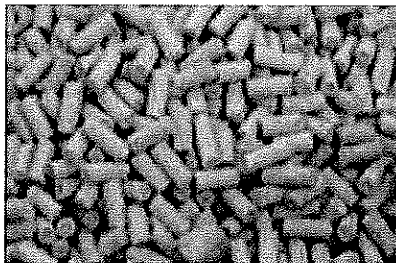
Prevalence of bovine TB in cattle herds and wild animal populations is also monitored regularly.

Most operations take place in the winter months when food is scarce and the bait is more attractive for possums. For operations protecting native fauna, control over the winter months also knocks back rat and stoat numbers through the best part of the spring – summer bird breeding season.

What will a typical operation involve?

A typical operation involves the following steps:

- Detailed planning, sometimes up to three years beforehand (developing operational and communications plans, tendering/contracting for interested operators),
- Approval from the Medical Officer of Health (through the local Public Health Unit of the District Health Board) to ensure any risk to public health is minimised and carefully managed,
- Seeking of landowner and/or occupiers' consent when aerial 1080 operations are to take place on their land, or where their land is needed to facilitate the operation (e.g. for helicopter landing sites, or a flight path where bait is being flown over),
- Consultation/notification with iwi, stakeholders and landowners neighbouring the operational area (e.g. through one-on-one conversations, targeted fliers) and with known users of the area (e.g. tramping and hunting clubs)
- Where an operation takes place on public conservation land there is a separate approval process required from the Department of Conservation,
- Notification of operation details to the general public (e.g. through public notices, school newsletters),
- Pre-feeding of the treatment area with non-toxic tan coloured cereal pellets (below left) to attract the pests and to ensure any bait shyness is overcome,



- Erection of signage around the treatment area (e.g. at tracks and other access points) advising of operational details,
- Treatment of the operational area with toxic green cereal pellets (above right) containing biodegradable sodium fluoroacetate (1080), and
- Post operation monitoring and reporting to the Environmental Protection Authority.

Waikato aerial 1080 case studies¹

Forest condition - Mt Karioi, Pirongia Forest Park

Since regular cycles of aerial 1080 possum control on Mt Karioi commenced in 1993, the condition of forest canopy species favoured by possums has improved. Monitoring between 1993 and 2009 has shown an increase in kohekohe canopy cover.

Forest birds - Coromandel Forest Park

Over the period from 2006 to 2008, monitoring of tui and North Island tomtits at two locations on the Coromandel Peninsula in conjunction with aerial 1080 operations (Tapu and Kauaeranga Golden Cross) found:

- *No negative impact of an aerial 1080 operation on tomtit and tui populations at Kauaeranga,*
- *A rapid increase in tomtit numbers in the first year after an aerial 1080 operation at Tapu and an increase in tui numbers in the second year after the Tapu operation.*

Archev's Frog – Whareorino Forest

Archev's frogs were monitored before and after an aerial 1080 operation in 2012. Long term monitoring (2006 to 2012) prior to the aerial 1080 operation showed that the frog population within an area receiving ground-based rodent control was stable or increasing. Continuing the same monitoring protocol before and after the aerial 1080 operation showed no negative effect on frog survival or frog numbers. The frog population continued to improve in the rat control area where the ground based operation then aerial 1080 had been used, relative to the 'no rat control' area.

Kiwi, Fantails and Whio - Tongariro Forest

North Island brown kiwi chicks are highly vulnerable to predation by stoats. A long term research programme at Tongariro Forest has shown that aerial 1080 operations have protected the resident kiwi population. This programme has also benefitted fantail and whio (blue duck) populations and been shown not to negatively impact the resident North Island tomtit population. Outcomes include:

- *An increase in the number of kiwi chicks surviving and fantail nesting success in the first two years following aerial 1080 operations*
- *An increase in whio/blue duck ducklings in the years when aerial 1080 operations have been undertaken.*

Forest Birds – Pureora and Mapara

Studies of birds through aerial 1080 operations in Pureora Forest Park found:

- *All kaka (30) monitored through aerial operations in 2001 and 2008 survived*
- *54 out of 55 North Island kokako monitored through 5 aerial 1080 operations between 1986-1988 survived (cause of death of the one bird that disappeared is unknown). All North Island kokako (48-52) monitored through aerial 1080 operations 1990-1992 at Mapara survived, and*
- *All North Island robins (17) and tomtit (14) monitoring through an aerial 1080 operation in 1998 survived, following not so good outcomes the previous year.*

¹ Further New Zealand case studies (aerial and ground 1080 use) can be found at www.1080facts.co.nz/case-studies

1080 and the environment, are there risks?

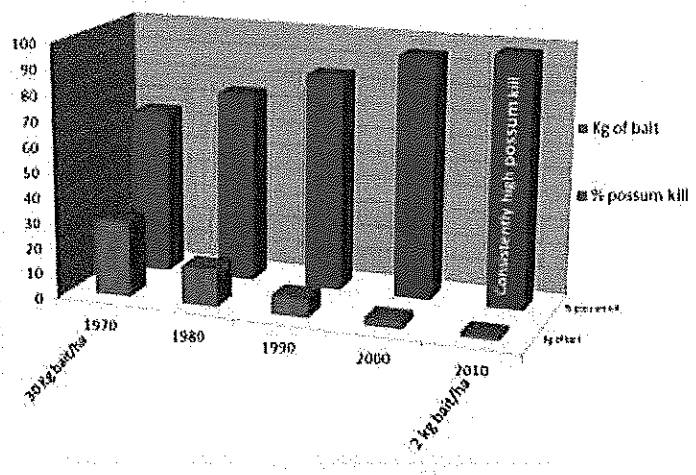
The risk to human health from aerial 1080 operations is extremely low. More than 500 water samples (nationally) have been taken after 1080 operations in the last five years. 1080 residues have never been recorded in public drinking water supplies. However, 1080 baiting does come with some risks. The poison is extremely toxic to dogs that scavenge possum carcasses following an operation. Dog muzzles and emetics are routinely provided for landowners and signage is used to warn dog owners to keep their dogs under control. Possum carcasses are monitored until they have decomposed and no longer present a risk to dogs. At this point signage is removed, typically 4-8 months after an operation.

1080 is biodegradable and does not persist or accumulate in the environment or the food chain.

On-going refinements and improvements in the use of 1080 have seen the amount of toxin used per hectare cut by up to 90 per cent over the past decade – see graph opposite.

A commonly used sowing rate now of two kilograms per hectare, using 12 gram baits, would see approximately 166 baits found over the area of a rugby field, or about six baits over the area of an average tennis court.

Bait quality is carefully controlled and baits are dyed dark green and are lured to attract possums and rats but repel most birds.



For more information

Find out more about 1080 on these websites:

- Parliamentary Commissioner for the Environment. June 2011. Evaluating the use of 1080: Predators, poisons and silent forests. Wellington. See <http://www.pce.parliament.nz/assets/Uploads/PCE-1080.pdf>
- Environmental Protection Authority (formerly ERMA). August 2007. An informal guide to the 1080 reassessment decision. Wellington. See <http://www.epa.govt.nz/Publications/ERMA-1080-Reassessment.pdf>
- Learn more from TBfree about eradication of bovine TB in New Zealand. See <http://www.tbfree.org.nz/TBeradication/Pestmanagement.aspx>
- Read about why the Department of Conservation's recommends the use of 1080 for pest control. See <http://www.doc.govt.nz/nature/pests-and-threats/animal-pests/methods-of-control/1080-poison-for-pest-control/>
- National Pest Control Agencies (NPCA). April 2011. Aerial 1080 pest control industry guidelines. See

http://www.npca.org.nz/images/stories/NPCA/PDF/b9_aerial_1080_guidelines_201104_web.pdf

- Read about recent 1080 case studies - A joint Federated Farmers and Forest and Bird initiative. See <http://www.1080facts.co.nz/case-studies>

We would like to hear from you

We would appreciate your feedback on this region-wide resource consents proposal.

A response form has been included with this information pack. For further information please contact one of the people below:

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Your feedback is appreciated and will be considered in the preparation of the final application.

Responses are requested please by 5pm, Wednesday September 30, 2015.



1080 helps protect our export industries



1080 helps support native biodiversity

