

Decision Report

Brook Waimarama Sanctuary Trust

Application for Resource Consents to the Nelson City Council

11 May 2016

1 Appointment

I have been appointed by the Nelson City Council (the Council) to conduct a hearing into the application lodged by the Brook Waimarama Sanctuary Trust (the Applicant) for various resource consents for a proposed operation, consisting of up to three aerial applications of baits containing brodifacoum, to eradicate rodents within the Brook Waimarama Sanctuary (the Sanctuary).

2 Description of the Proposal and Consents Sought

The nature of the proposal was well described in the application documents, the report prepared by the Council's reporting officers under section 42A of the RMA (the section 42A report), and the Applicant's opening legal submissions and evidence. The proposal comprises the following key elements:

- The Applicant is applying for consents for the application of baits containing the active ingredient brodifacoum to land and to water, for the storage and use of a hazardous substance (namely brodifacoum in bait form), and the erection of warning signs.
- Brodifacoum is an anticoagulant pesticide and its use is controlled by legislation including the Hazardous Substances and New Organisms Act 1996 (HSNO), the Agricultural Compounds and Veterinary Medicines Act 1997 (ACVM), the Health and Safety in Employment Act 1992 (HSE), the RMA and the Land Transport Rule: Dangerous Goods 2005.
- The application of the baits is part of a pest eradication programme that is not proposed to commence until the construction of the predator exclusion fence enclosing the Sanctuary, including associated infrastructure such as culverts, swales, and operational gates, has been completed. For the purposes of this decision report the predator exclusion fence and associated infrastructure is referred to as 'the Fence'.
- The proposed operation consists of up to three separate applications of baits at intervals of 2 – 3 weeks apart sometime between 1 June 2016 and 30 September 2017. The application states that the programme is likely to be undertaken during winter months.
- The target species for eradication from the Sanctuary are Ship and Norway rats (*Rattus rattus* and *Rattus norvegicus*) and house mice (*Mus musculus*). Other mammalian pests including possums, mustelids (ferrets, stoats, and weasels), feral cats, pigs, deer, and goats will also be killed through direct ingestion of baits or secondary poisoning. Prior to applying the baits, the Applicant proposes to undertake other ground based methods of pest control including bait stations, trapping, and hunting to reduce the numbers of these mammals.

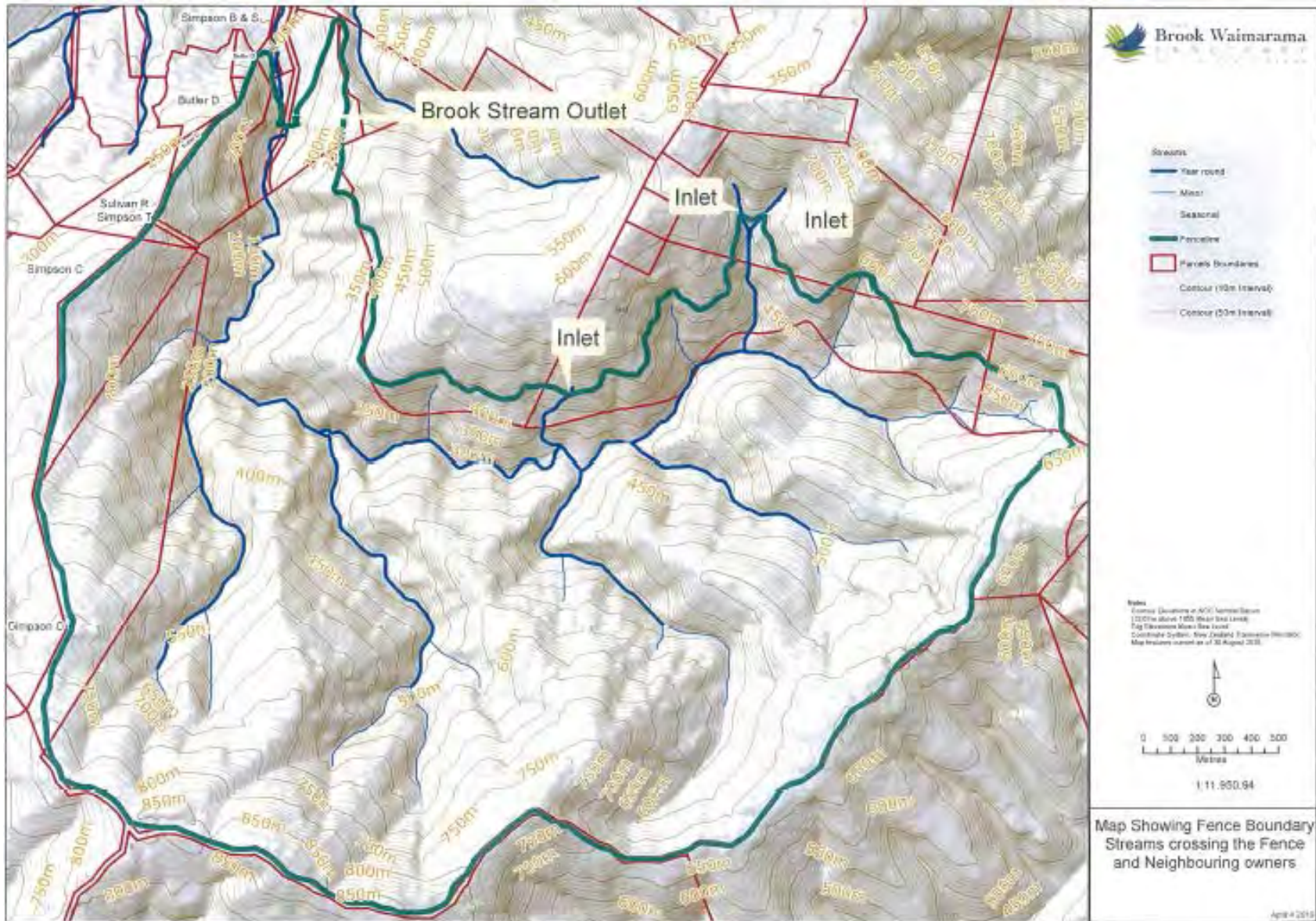
- A total of 26.5 tonnes¹ of bait is proposed to be applied over three applications resulting in a total average aerial application rate of approximately 36 kg/ha². An average bait application rate of approximately 18 kg/ha is proposed for the first application with approximately 9 kg/ha for the following two applications. Monitoring will be undertaken after the first and second bait application and these results will inform the decision as to whether a third application of baits is required.
- Baits will consist of 10 mm (2 g) Pestoff 20R pellets containing brodifacoum at 20 ppm. The baits will be dyed green to deter birds and will not contain lure or “Bitrex” in order to maximise its palatability to all three of the rodent species targeted.

A Project Overview map is included overleaf.³

¹ The application stated 24 tonnes of baits would need to be applied, however this figure has subsequently been increased to 26.5 tonnes

² The application stated that a rate of 31 kg/ha would be used, however this figure has subsequently been increased to 36 kg/ha

³ Provided by the Applicant prior to the hearing.



The application and the section 42A report described the activities for which consents are required but these documents do not specify the 'types' of consents under section 87 RMA. Despite this, I understand that the consents sought from the Council are as follows (all referenced as RM155046):

Land use consent: To store and use a hazardous substance, namely brodifacoum

Discharge permit: To discharge baits containing brodifacoum to land and to water

Land use consent: To erect warning signs

Both planning expert witnesses, Ms Squire for the Council and Dr Solly for the Applicant, agreed which rules of the Nelson Resource Management Plan were applicable and that the activities for which resource consents are sought, when 'bundled', have a discretionary activity status. I agree with their assessment and adopt it for the purposes of this decision.

I asked the two expert planning witnesses whether the discharge of the baits to air required a discharge permit. Both advised me that no such discharge permit was required. Ms Squire advised me that the baits would not change the physical, chemical, or biological nature of the air and therefore, in her opinion, were not deemed to be a 'contaminant' as defined by the RMA. Dr Solly advised that brodifacoum is not an 'agricultural' under the Nelson Air Quality Plan and that the release of the baits into the air does not constitute a 'discharge' to air but that the baits do get discharged to land or water when they land. He stated that this differs from the aerial discharge of agriculturals as they are usually in droplet form when discharged into the air.

3 Hearing and Appearances

The hearing was held in the Council Chambers, Civic House, Nelson on Wednesday 6 April 2016. I undertook a site visit the following day, Thursday 7 April 2016, accompanied by Mr B Stent (an employee at the Sanctuary) and Ms Squire. Mr Stent was not present at the hearing. Neither he nor Ms Squire proffered any opinion during the site visit. We drove up the western access, then along the southern boundary towards the area of the Fence which had slipped. We then drove back and walked up to the proposed helicopter loading area, walked around the northern parts of the Sanctuary, including around the concrete dam across Brook Stream where it flows out of the Sanctuary – this being the area where the bait screen is proposed to be installed.

A list of the parties who appeared at the hearing is provided in Appendix 1 of this decision report. In accordance with section 103B of the RMA I pre-read the section 42A report and the briefs of evidence that were circulated to me before the hearing commencing, these briefs being from:

- a. Dr D Butler – for the Applicant
- b. Dr D Smith – for the Applicant
- c. Dr G Harper – for the Applicant
- d. Dr L Solly – for the Applicant
- e. R Empson – for the Applicant
- f. J E Hilton – for Dr Simpson (submitter)
- g. S Harris – for R Sullivan (submitter)
- h. C St Johanser – for R Sullivan (submitter)
- i. B Buckland – for R Sullivan (submitter)
- j. Dr A Dale – for S Simpson (submitter)

I had no questions for some of the witnesses hence they were excused from attending the hearing.⁴

I have not attempted to summarise the written and verbal submissions, statements or evidence received during the course of the hearing as that would result in an unnecessarily lengthy decision. Copies of the written material, including material tabled during the hearing, are held by the Council. I took my own notes of the verbal statements and evidence presented and answers to my questions. However, I have referred to, summarised or quoted from relevant elements of some of the submissions, statements, and evidence in the balance of this decision report.

I record that some of the evidence presented at the hearing by the Applicant refined and updated matters dealt with in the application and AEE. This primarily included matters relating to the amount of baits to be applied during each application, the proposed setback distance from the Fence, details on the number and size of the bait screens, and matters related to opportunistic carcass harvesting. I cover these in greater detail later in this decision.

4 Procedural and Process Issues

4.1 Directions and Further Information

At the end of the formal hearing I advised the parties that I would probably be requesting further information from the reporting officers. As I recorded above, I undertook a site visit on Thursday 7 April 2015. Following that site visit I issued Directions and a further information request.

During the site visit I noted that the two 'tongues' of the sanctuary which extend northward on either side of the access road to the visitor centre have steep slopes and are the only areas where there is sanctuary vegetation upslope of the Fence (everywhere else the Fence is upslope of the sanctuary vegetation). I therefore requested the following further information from the Applicant:

1. *Whether it considers the proposed setback in these two 'tongue' areas will be sufficient to avoid bait overspill in a downslope direction given the steepness and proximity of vegetation to the fenceline (noting that the Brook Stream is located nearby).*
2. *Details on how water overland flow runoff from these slopes will be managed, noting that this water would not flow into the Brook Stream upstream of the proposed bait/carcass screen.*

I also requested the following information from the reporting officer (Ms Squire):

1. *Copies of the resource consent decisions of, and consent conditions that were imposed by, the relevant regional council for the following fenced mainland islands:*
 - a. *Zealandia*
 - b. *Tawharanui Regional Park*
 - c. *Maungatautari Ecological Island*
 - d. *Orokonui Eco-sanctuary*
 - e. *Rotokare Sanctuary*
 - f. *Bushy Park*
 - g. *Shakespear Open Sanctuary*

⁴ Mr J E Hilton (for Dr Simpson); Mr C St Johanser and Ms S Harris (both for R Sullivan).

2. *Copies of the compliance monitoring reports for the consents referred to in (1) above. These reports may either be in the form of council compliance reports or reports required to be prepared and submitted by the consent holder.*
3. *A brief summary table identifying the internal setback distances and whether any overspill of baits occurred or were recorded for the consents referred to in (1) above*

In addition, the Directions outlined a timetable for the information to be provided and also when the Applicant's Right of Reply should be provided. I also recorded that the further information requested did not require the hearing to be reconvened and that the information should also be forwarded to the submitters so that they had copies of all the information that was in front of me.

The Applicant provided its Right of Reply in writing on 16 April 2016.⁵ I note here that Mr McFadden's Right of Reply included copies of some of the consents that I had requested copies of from Ms Squire, as well as other consents not listed in the Directions. Mr McFadden states that it was not apparent as to whom was to obtain these decisions and conditions⁶, however my Directions dated 7 April 2016 clearly identified that it was Ms Squire who was to provide these to me.

I received the further information from Ms Squire on 21 April 2016 and requested that the Applicant provide an amended version of the map submitted in the Right of Reply showing the extent of the volunteered 50 m setback as also including the area specified in Ms Squire's paragraph 1.3 of her further information report. I formally closed the hearing on 21 April 2016, having satisfied myself that I did not require any further information (apart from the amended map) from the reporting officers, the submitters, or the Applicant. I received the amended map on 5 May 2016.

4.2 Notification

A number of the submitters questioned the Council's decision to serve notice of the application to only a limited number of persons (limited notified) as they considered that the application should have been publicly notified.

I record here that the question of whether the application should have been publicly notified is not something that I am able to consider in these proceedings. Any challenge to that decision would need to be by way of judicial review as it is a process matter.

4.3 Section 113 of the RMA

Section 113(3) of the Resource Management Act (RMA) states:

- A decision prepared under subsection (1) may, -
- (a) instead of repeating material, cross-refer to all or a part of -
 - (i) the assessment of environmental effects provided by the applicant concerned;
 - (ii) any report prepared under section 41 C, 42A, or 92; or
 - (b) adopt all or a part of the assessment or report, and cross-refer to the material accordingly.

⁵ I note that Mr McFadden's covering letter is dated 15 April 2016, however I did not receive the Right of Reply until the next day.

⁶ Right of Reply, para 3.1

In the interests of brevity and economy, I intend to make use of section 113 of the RMA and I will not dwell on matters that were not in contention. That is not to say I have glossed over or ignored any matters that were not clearly in contention. I have carefully reviewed the documentation relating to those matters and am satisfied that the outcomes are appropriate. I discuss this later in this decision report.

4.4 Consultation

A number of the submitters considered that there was a lack of genuine consultation and that the Applicant had overrepresented the consultation that it had undertaken with neighbouring landowners.

Under section 36A of the RMA there was no obligation on the Applicant to undertake consultation for the application. Notwithstanding that, the Applicant has consulted with a number of persons and organisations, including nine iwi. Letters of support from the Department of Conservation, Royal Forest and Bird Society of New Zealand Inc, Fish and Game New Zealand, and D and D Butler were included in the application.

5 Notification, Submissions, and Written Approvals

The application was limited notified on 4 December 2015, with notice being served on four neighbouring property owners, eight iwi, the Department of Conservation, and the Council itself. The submission period closed on 22 January 2016.

A total of five submissions were received by the Council. One indicated conditional support and the remaining four opposed the application. The section 42A report provides a useful summary of the contents of these submissions⁷ and I adopt that summary for the purposes of this decision.

The application included the written approval of the Council (signed by Mr A Louverdis, the Council's Group Manager Infrastructure).

The application also included a letter of support from one of the neighbouring property owners, namely D and D Butler, and there was some confusion as to whether this letter constituted a written approval under the RMA. Ms Squire advised me that it was not in the prescribed form nor did it make any reference to section 95 of the RMA.

Having read the letter, it is clear to me that it is a letter of support and does not constitute a written approval under the RMA as it does not confirm that the Butlers have been given a copy of the application and assessment of environmental effects and the letter does not include any statement to the effect that the Butlers acknowledge and agree that any effects of the proposed activity on them will not be taken into account.

6 Matters not in Contention

The erection of warning signs and any adverse effects associated with the signs was not contended by any party. These signs will not be permanent and the adverse effects of them will be minimal.

Noise will be generated by the helicopter, however none of the submitters raised this as a significant issue. In any case the noise effects will be temporary in nature (ie. during the aerial application of baits).

⁷ Section 42A report, Table 1

7 Matters of Contention

The matters that were in contention related to the following matters:

1. The integrity of the Fence and associated infrastructure (culverts and swales), including the associated risks of poisoned animals escaping from the Sanctuary and the consequential effects within surrounding land.
2. The risks of poisoned animals being transferred outside of the Sanctuary by birds of prey.
3. The appropriate setback distance to the Fence within which no baits may be discharged aerially to ensure no overspill of baits over the Fence occurs.
4. The inhumanness of using brodifacoum compared with other methods of pest control.
5. The effects of the activity on water quality.

In this section of my decision I consider these matters of contention. Points 1 and 2 are considered together as they are related.

7.1 Integrity of the Fence and Poisoned Animals Leaving the Sanctuary

7.1.1 Introduction

The aim of the proposal is to eradicate rodents, namely rats and mice, from within the Sanctuary. The proposed poison to be used, brodifacoum, is a non-specific broad spectrum toxin which means that it can affect a wide range of animals. If these animals ingest a lethal dose of brodifacoum they will die, however if they ingest a sub-lethal dose the brodifacoum gets stored in the animal's liver where it can persist for a long period of time. Secondary poisoning can result if an animal which has brodifacoum in its body (either a dead animal or one which has brodifacoum stored in its liver) is eaten by another animal.

While the deaths of target and non-target species, either via direct ingestion of baits or through secondary poisoning, is expected within the Sanctuary, adverse effects can occur outside the Sanctuary if poisoned animals either escape or are transported there by scavenging or predatory birds. Brodifacoum can also end up outside the Sanctuary if any overspill of baits occur during the application of baits, however I discuss this matter in Section 7.2 of this decision report.

I was advised by several of the witnesses that the integrity of the Fence was the most critical aspect of the proposal, both in respect of ensuring the aims of the operation are achieved and also to minimise the likelihood of poisoned animals escaping from the Sanctuary. Once outside of the Sanctuary, any poisoned animal can result in the secondary poisoning of other animals who may eat the poisoned animal, including pigs that may be hunted by people for their meat.

There are three main pathways by which poisoned animals could escape the Sanctuary. Firstly, animals with climbing abilities are able to escape over the Fence as it has been designed to prevent unwanted animals to 'enter' the Sanctuary but not specifically to prevent animals leaving it. That is, the 'hood' on the top of the Fence has its overhang towards the outside of the Fence, meaning that any animals trying to enter the Sanctuary by climbing over the Fence are obstructed. However, animals within the Sanctuary are able to climb the Fence without a similar obstruction and can therefore escape the Sanctuary. Secondly, animals, including larger mammals such as goats, pigs and deer, and flightless birds can escape from the Sanctuary if there is a breach in the Fence. Thirdly, poisoned animals can be transported out of the Sanctuary by scavenging or predatory birds.

I discuss these three possible pathways in the following sections.

7.1.2 Poisoned Animals Climbing the Fence

Dr Smith stated that smaller poisoned mammals with climbing abilities could potentially escape from the Sanctuary over the Fence, however he advised that these mammals would be moribund and unlikely to try to escape over the Fence.⁸ In addition, he stated that small mammals living near the Fence before the application of baits will have become habituated to the presence of the Fence and will have established home ranges along the inside of the Fence boundary – such animals are unlikely to try to leave the Sanctuary.⁹

I heard no evidence to the contrary and accept Dr Smith's evidence on this matter. That is, this pathway exists but it is unlikely that poisoned animals will leave the Sanctuary by climbing over the Fence.

I note that the Applicant has volunteered conditions which would require frequent monitoring of the perimeter of the Fence and that any carcasses found during such inspections will be collected and destroyed. This further reduces the risks of secondary poisoning by any poisoned animals that may have climbed over the Fence and subsequently die.

7.1.3 Integrity of the Fence

Dr Smith stated that the pigs, goats, and deer that are present within the Sanctuary during the operation will not be able to escape through the Fence¹⁰ provided it is secure. These mammals will not be able to climb the Fence so the only way they could escape would be through a breach of it.

Dr Butler advised me that the Fence was currently 'about 95% complete' and the Applicant expects it to be completed in May this year. I asked Mr Butler if there had been any integrity issues with the parts of the Fence that had been completed to date and he advised me that a stag had damaged a small part of the Fence and that one section of the Fence had slipped during extremely heavy and intense rain which fell in February 2015.¹¹ Dr Butler advised that the ground conditions of the Fence route had been checked by a geotechnical engineer and that the area where the slip occurred was a known risk area. He also stated that other parts of the route had similar ground conditions which would be monitored during the regular inspections that occur around the Fence.

⁸ Smith EIC, para 4.1.5

⁹ Ibid

¹⁰ Smith EIC, para 4.1.5

¹¹ This rainfall event caused widespread damage and flooding in and around the Nelson and Tasman districts

During my site visit I was taken to the area where the Fence had slipped. The slip is substantial and remediation work is due to commence to fix the damage. I note that there was no mention of this slip and damage to the Fence in any written evidence provided by the Applicant. Given the critical importance of the integrity of the Fence to the success of the proposal and to contain poisoned animals, I would have expected the Applicant to have brought the matter of the slip to my attention in its evidence.

The Applicant advised me that the integrity of the Fence would be checked before, during, and after the baits are applied within the Sanctuary. Dr Butler agreed that there should be a period of time between the completion of the Fence and the first application of baits, however he was unable to suggest an appropriate time period. When questioned, Dr Smith was also unable to suggest a suitable period of time to prove the integrity of the Fence.

Dr Simpson, Mr Sullivan, and Mr C Simpson all considered that the integrity of the Fence should be proven for at least 12 months (four seasons) following its completion.

Ms Squire did not proffer an opinion on how long she considered the integrity of the Fence should be proven before the application of baits, but stated that as this was a new fence it is likely to have been constructed using current methodologies and therefore its integrity is likely to be better than other similar fences in New Zealand. Mr Tremblay initially recommended 'more than 6 weeks' and when questioned further considered that 6 months would be an appropriate timeframe.

None of the witnesses were able to advise me on what periods of time other similar fences were needed to be proven around New Zealand before baits were applied, apart from Ms Empson who advised there was a 6 week period between the completion of the Zealandia fence and the application of baits there. However, she was unable to suggest a suitable proving period for the Sanctuary's Fence but did advise me that it should be until at least a similar rainfall event had occurred which caused the current slip to ensure no further slips eventuate.

The 'newness' of the Fence does not necessarily guarantee that risks to its integrity are lower than other similar fences built around New Zealand. The fact that there has already been a breach of the integrity, and the fact that Dr Butler advised that there are other parts of the Fence route with similar ground conditions to where the slip occurred, strongly suggests to me that the integrity of the Fence needs to be proven following its completion and before any baits are placed within the Sanctuary.

However, in determining the length of time to prove the integrity of the Fence another relevant consideration is what effect any delay in applying the baits will have on the Applicant's ability to maximise the effectiveness of the operation to eradicate rodents.

In his Right of Reply Mr McFadden presents arguments as to why there should be minimal delay between the completion of the Fence and the application of baits.¹² He states that bait applications should, according to best practice, take place during winter months because *'pest numbers and food supply are typically at their lowest, thereby making a successful baiting operation more likely'* and therefore the Applicant's intention is to apply the baits *'during the imminent winter months'* (i.e. in 2016). I note that these statements appear to be at odds with the contents of the letter sent by the Applicant to the Council on 27 November 2015 which specifically sought to amend the consent application to provide a greater period of time for the baits to be applied (between 1 June 2016 to 30 September 2017) as there *'could be a very large beech mast this year'* and the bait application window in the original application (which was between 1 June 2016 to 30 September 2016) was *'too short'*.

¹² Right of Reply, para 4.6

I heard no evidence whether or not a large beech mast occurred over the 2015/16 summer but, based on Mr McFadden's statements in his Right of Reply that the Applicant intends to apply the baits this winter, I can only conclude that no large beech mast occurred.

The Right of Reply further states that '*it is well-known locally that a beech-mast (heavy production of seed by beech trees) is expected – the more food the greater the breeding of the pests*'.¹³ I am unsure what Mr McFadden means by 'expected' but can only assume he means during next summer (i.e. 2016/17), however no expert evidence was presented to me regarding this expected beech mast. I note that the AEE documents include sections¹⁴ regarding the timing of the applications of baits but they make no mention or reference to beech masts as being an important aspect to consider in determining the optimal timing of the application of baits.

Lastly, Mr McFadden states that if no application of baits is possible in the 2016 winter and if a significant beech mast occurs in 2017 then '*the risk to the whole venture of the Sanctuary is obvious*'. This statement is not substantiated by any evidence. I heard no evidence that not being able to apply the baits within the next two winters posed a significant risk to the Sanctuary not being able to achieve its goals and vision. Ensuring that the Fence is secure, however, forms a critical component not only of the successfulness of the bait applications and minimising the risk of poisoned animals leaving the Sanctuary, but also the ongoing prevention of unwanted animals entering the Sanctuary.

I note that the volunteered conditions attached to the Right of Reply includes a condition which would require the Applicant to set up a bank account which retains a minimum balance of \$50,000 for the duration of the consents. The condition states that this money may only be used for the purposes of maintenance of and preservation of the integrity of the Fence. The Right of Reply provides no discussion regarding this condition, but I understand it has been volunteered in response to Ms Squire's recommendation that some form of financial instrument should be imposed to ensure the integrity of the Fence is able to be maintained. It would have been useful if the Right of Reply had provided some background information on how the figure of \$50,000 was calculated, in particular what length of the Fence could be reconstructed for this amount of money.¹⁵ In any case, this condition provides me with confidence that the Applicant will have sufficient funds available to undertake works to reinstate the Fence's integrity should it be compromised during and following the application of baits.

In light of the Applicant's volunteered condition requiring money to be available to remediate any Fence integrity issues that may arise during and following the application of baits, I consider that a proving period of at least six weeks should apply in this case. This period provides a reasonable balance between proving the Fence's integrity and providing the Applicant sufficient flexibility to apply the baits this winter if it considers this will provide the greatest chance of rodent eradication within the Sanctuary.

In terms of assessing and confirming the integrity of the Fence, I consider it is appropriate that the Applicant engages the services of an independent person who is experienced in undertaking assessments of such fences to confirm the integrity of the Fence at the following times:

- immediately following completion of its construction;
- at the end of the six week proving period - that is, before the first application of baits;

¹³ Ibid

¹⁴ Draft Operations Plan, para 6.4.1; and Wildlands Report, Section 4.2

¹⁵ I was told that the entire Fence construction cost is \$4.2 million and the Fence is 14 km long. This equates to a construction cost of \$300/m and \$50,000 would therefore enable ~170 m of the Fence to be constructed.

- prior to the second and third applications of baits – meaning that the second and third application of baits cannot be undertaken until the integrity of the Fence is confirmed; and
- every two months for a period of 12 months following the last application of baits.

This independent person would essentially be confirming that the Fence has a ‘warrant of fitness’. In the event that any inspection by the independent person identifies a breach in the integrity of the Fence then the Applicant should immediately remedy the situation, and having the \$50,000 balance in the bank account provides me with certainty that such remediation works are able to be undertaken. The independent person’s inspections should be over and above the Applicant’s own regular inspections of the Fence. If any inspections by the Applicant which finds the integrity of the Fence has been compromised should also be immediately be remedied. I address this further in the Conditions section of this decision report.

7.1.4 Transport of Poisoned Animals by Birds

The other possible pathway for poisoned animals to escape the Sanctuary following the application of baits is by way of scavenging or predatory birds that may pick up poisoned animals (either as carrion or live) and drop them outside the Sanctuary.

Dr Smith advised me that the risks of this occurring are minimal because the majority of the Sanctuary is densely vegetated, making carcasses difficult to locate by aerial scavenger birds.¹⁶

Dr Butler stated that the only open areas within the Sanctuary consisted of ‘one rough paddock and some open areas of riverbed’.¹⁷ Further, he stated that the risk of harriers dropping poisoned carcasses outside the Sanctuary is ‘remote’ as their talons lock onto their prey.¹⁸

Collection and disposal/destruction of animal carcasses is one method to reduce the likelihood of such carcasses being transported out of the Sanctuary. Section 6.5.26 of the Draft Multispecies Pest Eradication Operational Plan (the Operational Plan), submitted with the application, states that opportunistic carcass harvesting would be undertaken after each bait drop ‘*along the tracks*’.

Dr Harper, who peer reviewed the Operational Plan, presented somewhat conflicting evidence on the extent of what ‘*opportunistic carcass harvesting*’ the Applicant should be required to undertake. He stated that carcass searching would be undertaken by volunteers along the tracks after each application of baits as well as on an on-going basis to minimise effects on carrion feeders such as the Australasian harrier and morepork¹⁹. However, Dr Harper then suggested that the condition recommended by the reporting officers requiring such carcass searching be restricted to ‘*carcasses found in water bodies and outside the fence*’²⁰. In response to questions he advised that the open grasslands areas are the most likely areas where harriers could pick up a carcass and that these areas could possibly be included in the condition.

¹⁶ Smith, EIC, para 4.1.6

¹⁷ Butler, EIC, para 5.2(ii)

¹⁸ Ibid

¹⁹ Harper, EIC, para 18(ii)

²⁰ Ibid, para 21(d)

The final set of volunteered conditions attached to the Right of Reply has amended the condition such that searching for carcasses would occur for two weeks following each application of baits. Such searching would occur both inside and outside of the Sanctuary including water bodies, the open grassland areas as well as the public walking tracks within the Sanctuary.

The Applicant has a comprehensive monitoring network within the Sanctuary which is proposed to be used to assess the success of the operation²¹. Dr Smith tabled a document entitled 'Brook Waimarama Sanctuary Pest Eradication Monitoring and Mop Up Plan' which outlines the monitoring proposed following the application of baits. The tracking tunnel grid is 50 m by 100 m and weekly checks of the tunnels are scheduled for the first two months after the application of baits. This requires staff and volunteers to visit each tunnel.

In addition, the Applicant has a comprehensive trap network which will continue to be used following the application of baits. These traps are also proposed to be checked weekly for the first two months of the application of baits.

It is clear that staff and volunteers will be out and about within the Sanctuary very frequently and will visit most areas of it following the application of baits. I consider it appropriate to require any dead carcasses to be collected from any open areas during visits to tracking tunnels and traps to further reduce the risk of poisoned animals being transferred out of the Sanctuary or into surface water bodies. I discuss this further in the Conditions section of this decision report.

7.1.5 Summary

In summary, I consider that the risks of poisoned animals escaping from the Sanctuary are very low provided the integrity of the Fence is proven before baits are placed within the Sanctuary and also provided the Fence's integrity is checked and maintained following the operation.

7.2 Appropriate Internal Setback Distance for Aerial Application of Baits

The aerial application of baits within the Sanctuary has the potential to result in overspill of baits outside the Fence and the risk of this occurring decreases the further the distance inside the Fence the baits are dropped. This distance was referred to as the 'setback' distance and there was significant difference of opinion between the Applicant's witnesses and the submitters regarding the appropriate setback distance.

Dr Simpson, Mr Sullivan, and Mr C Simpson all considered that the setback distance along the Fence located adjacent to their property boundaries should be at least 200 m so that there is no risk of baits being accidentally discharged outside the Sanctuary, including on their land.

The application stated that a setback distance of 5-10 m would apply inside the entire perimeter of the Fence. Mr McFadden's opening submissions included a set of conditions which were based on those included in the section 42A report, and these included a new condition specifying a setback distance of 15-20 m along the western part of the Fence adjoining privately owned land. During the course of the hearing the Applicant volunteered a setback distance of not less than 15 m inside the entire perimeter of the Fence. In his Right of Reply Mr McFadden advised that the Applicant is now volunteering a 50 m setback distance along the western boundary and also along the two narrow northern 'tongues' of the Sanctuary.

²¹ AEE, Section 10.1

I consider the volunteered setback distances, in particular the 50 m along sensitive boundaries, to be appropriate and is in line with setback distances used for other similar applications around New Zealand.²² This setback distance, together with the fact that there is an additional un-vegetated area between the Fence and the submitters' property boundaries, which is proposed to be monitored during and following the application of baits, mean that the chance of any baits ending up on neighbouring properties is extremely remote.

I consider that monitoring of the application of baits along the western boundary should include observers who are within line of sight of each other to check that no overspill occurs. The Applicant should also invite the submitters, or their representative(s), to be involved in this monitoring.

7.3 Inhumanness of Using Brodifacoum

Dr Dale, on behalf of Mrs S Simpson, presented evidence regarding brodifacoum's mode of action. She stated that brodifacoum was the least humane of the five main possum poisons used in New Zealand and her recommendation was that an alternative, more humane, method of pest control be used by the Applicant.

Dr Dale explained that the Compliance Section of the SPCA had responsibilities under the Animal Welfare Act 1999, including taking enforcement action where any animal is killed in such a manner that the animal suffers unreasonable or unnecessary pain or distress. In answers to my questions Dr Dale advised that the SPCA had never taken such enforcement action in relation to the use of brodifacoum for pest eradication and if it were to do so in this instance it would be a test case. She acknowledged that the Animal Welfare Act 1999 included provisions which exempted its application in situations where a hazardous substance is used that is approved under the HSNO Act and used in accordance with the controls under that Act. In response to questions, Dr Dale confirmed that the SPCA had no involvement in the approval process for brodifacoum under the HSNO Act.

The Applicant acknowledges that brodifacoum is not a humane product²³ and that its mode of operation results in a relatively slow death of poisoned animals, however it has considered alternative methods, including alternative poisons, and considers that brodifacoum is the best option to use to achieve the goals and vision of the Sanctuary.

As Mr McFadden correctly points out in his Right of Reply, should the SPCA wish to pursue enforcement action on the Applicant (or anyone else) for using brodifacoum then it still has this opportunity to do that if chooses.²⁴

Dr Dale also requested that, if resource consents are granted, there should be a requirement for any animals that are observed to be suffering to be put to death immediately so as to not prolong their suffering. I note that the Applicant's volunteered conditions includes such a condition.

²² Further information provided by Ms Squire in her report dated 20 April 2016

²³ Opening legal submissions, para 3.9

²⁴ Right of Reply, para 4.3

7.4 Water Quality Effects

Applying baits containing brodifacoum aerially will result in some of the baits landing directly in streams that flow within the Sanctuary. In addition, baits that are discharged to land can potentially enter streams through overland flow.

Dr Simpson's submission states that she collects and uses spring water and wants assurances that the water quality of the spring will not be affected by the application of baits.

Mr C Simpson's submission raises concerns about the breakdown of brodifacoum in water and that it will be washed into the Brook Stream and then into the Maitai River, and finally end up in the Waimea Estuary.

Dr Smith stated that brodifacoum is 'extremely insoluble', having a solubility of less than 10 mg/L and it binds to organic matter.²⁵ I asked Dr Smith whether there was any more detailed information on the actual solubility of brodifacoum, rather than it just being expressed as '*less than 10 mg/L*' as I noted that the concentration at which 50% of rainbow trout were reportedly killed (LC₅₀) was 0.051 mg/L²⁶, this concentration being 2 orders of magnitude lower than 10 mg/L. Towards the end of the hearing Dr Smith referred me to different LC₅₀ figures contained in the AEE, which reports the LC₅₀ for rainbow trout to be 0.155 mg/L (24 hours) and 0.05 mg/L (96 hours).

Dr Smith's evidence and the AEE presents information on the results of water quality testing undertaken at other sites where brodifacoum baits have been applied. This testing has been extensive and only one water sample has ever recorded a brodifacoum concentration above the detection level for the test (the detection limit being 0.02 parts per billion (ppb), or µg/L²⁷), and that water sample, which had a brodifacoum concentration of 0.083 mg/L was collected within 20 cm of baits that were on the bed of a stream. I am satisfied that, based on the results of water testing undertaken at other similar operations in New Zealand, that the effects on water quality, and therefore the aquatic ecosystem within the Brook Stream and its tributaries within the Sanctuary, are negligible.

Despite this, the Applicant is proposing to undertake water quality monitoring at two locations along Brook Stream, one at the point where the stream exits the Sanctuary, and another 800 m downstream. Samples would be collected before each application of baits, and then at 12, 24, and 48 hours after the application. A final set of samples would be collected two weeks after the last application of baits. In answers to questions, Dr Smith advised me that he did not consider it necessary to collect additional samples following significant rainfall events in between the applications of baits.

I asked Dr Simpson where the spring is which she uses and she pointed this out on an aerial photograph. The only way that brodifacoum could potentially become present in this spring water would be by baits falling directly at the spring site or through contamination of the groundwater that emanates at the springs.

²⁵ Smith, EIC, para 4.1.9

²⁶ AEE, Wildlands Report, para 6.2.5

²⁷ µg/L = micrograms per litre; 0.02 µg/L = 0.00002 mg/L

I am satisfied that, based on the mitigation measures proposed by the Applicant, namely a 50 m setback within which no bait can be applied aerially, and the presence of observers during the application of baits along the western boundary, that the chance of any baits landing anywhere near the spring is extremely remote. Further, the evidence presented to me shows that brodifacoum is strongly bound to organic matter in the soil and micro-organisms present in the soil degrade brodifacoum. This, together with the very low solubility of brodifacoum means that the risks to groundwater quality are negligible. Further, I heard no evidence to suggest that groundwater beneath the area where baits will be applied flows towards the spring which Dr Simpson uses.

8 Statutory Instruments

8.1 Policy statements and plans

The RMA planning instruments that provide the planning and policy framework for my consideration of the application are as follows:

- Resource Management (National Environmental Standard for Sources of Human Drinking Water) Regulations 2007 ('NES-Drinking Water');
- National Policy Statement for Freshwater Management 2014 ('NPSFM');
- Nelson Regional Policy Statement ('NRPS');
- Nelson Resource Management Plan ('NRMP');

The application was comprehensively evaluated against these statutory instruments and plans in the section 42A report and by Dr Solly. I note that the NRPS provisions were not assessed in the application or in the section 42A report, however Dr Solly does provide an assessment of the relevant provisions of the NRPS in his evidence²⁸ and summarised by Mr McFadden²⁹.

In addition to the above, Dr Solly³⁰ and Ms Squire³¹ advised that there were a number of other non-statutory documents relevant to this application.

A number of the submitters appeared to have concerns that the reference to '*other regulations*' in section 104(1)(b)(ii) of the RMA did not require consideration of other relevant legislation such as the Animal Welfare Act 1953 or the Reserves Act 1977. Mr McFadden correctly outlined³² that section 104(1)(b)(ii) is restricted to regulations made under the RMA and therefore other legislation is not required to be considered under that section of the RMA. However, this does not mean that the Applicant does not need to comply with requirements of other legislation, in fact it must do so and this is acknowledged by Dr Solly in his evidence³³. There are likely to be a number of pieces of legislation that the Applicant will need to comply with, however those matters are not directly relevant in my consideration of this application under the RMA.

²⁸ Solly, EIC, paras 35 to 39

²⁹ Opening legal submission, paras 3.13 to 3.15

³⁰ Solly, EIC, paras 40 to 43

³¹ Section 42A report 5.70 to 5.74

³² Opening legal submission, para 3.16

³³ Solly, EIC, para 55

In terms of the NRMP provisions, Dr Solly's planning assessment, included in the application and appended to his evidence concludes:

"...the proposed activity sits comfortably with some objectives and policies; and less comfortably with others. However, provided that appropriate measures are taken to manage the storage and use of bates, containing Brodifacoum, the proposed activity does not appear to be completely contrary to any of these provisions, and a case can be made that a grant of Consent would be consistent with the objectives and policies of the NRMP."³⁴

Ms Squire agrees with Dr Solly's assessment and adopts it for the purposes of her section 42A report, with the exception that she does not agree with his conclusions that brodifacoum is 'insoluble' and will not affect water quality³⁵. In respect to the water quality effects Ms Squire stated that the activity would (my emphasis) '*..not be contrary to the objectives for water quality, its uses and values and the protection of in-stream ecological values*'³⁶. However, in response to questions, she advised she considered that the activity would 'be consistent' with the objectives for water quality set out in the NRMP.

I received no other qualified planning evidence from any party.

I have reviewed the relevant provisions of the statutory instruments myself and concur with the advice of Ms Squire, the evaluation set out in the application document, and the advice of Dr Solly.

I have had regard to all of the relevant statutory instruments and have considered their relevant objectives and policies which I must have regard to under section 104(1)(b) of the RMA when evaluating the application and the matters raised in the submissions.

I find that the Applicant's proposal is consistent with the NPSFM and also generally consistent with the relevant objectives and policies of the NRPS and the NRMP and where it may not be fully consistent with those provisions, the adverse effects giving rise to any inconsistency can be avoided, remedied or mitigated by appropriate conditions of consent imposed under section 108 of the RMA. I discuss those conditions later in this decision report.

In terms of the Drinking Water NES, Dr Solly stated that it was not relevant as the Brook Stream catchment is not a source for human drinking water³⁷. However, in answers to my questions he agreed if any baits were to overspill into the Roding River catchment, located to the south of the Sanctuary, then the Drinking Water NES would be relevant as that catchment is used as a water source by the Council. Mr McFadden provided further discussion on this matter in his Right of Reply stating that there was '*no likelihood of pallets [sic] falling into that catchment*' due to the setbacks and checking for baits along the perimeter of the Fence after each application of baits. In any case, I note that the Council's Group Manager Infrastructure (Mr Louverdis) has provided written approval for the application on behalf of the Council meaning that the Council has no concerns regarding the proposed activities.

³⁴ Solly, Planning Assessment, Section D, page 6.

³⁵ Section 42A report, para 5.63

³⁶ Section 42A report, para 5.64

³⁷ Solly, EIC, para 29

8.2 Sections 105 and 107 of the RMA

I must have regard to sections 105 and 107 of the RMA as the application is for a discharge permit(s), the latter section being only relevant to those discharges that are directly to water.

Ms Squire provides an analysis of these two sections as they relate to this application. She considers that the proposal satisfies the matters set out in section 105 and that none of the effects described in section 107 will occur as a result of the discharges³⁸. I agree with her assessment and I heard no evidence to the contrary.

8.3 Part 2 matters

8.3.1 Positive effects

If successful, the outcomes of the proposed activities will be a predator free sanctuary within which native fauna and flora will be able to flourish and the area will be restored to as natural a state as possible. The evidence presented to me confirms that, based on similar operations elsewhere in New Zealand, in the long term there will be a higher abundance of native and endemic birds compared to the present.

The aims of the Applicant in trying to achieve these positive effects were acknowledged and generally supported by the submitters, however the key point of difference relates to the method to achieve the end result.

In addition to the ecological benefits that will result, the Sanctuary will be used for educational and training purposes, research, and a tourist attraction. These are all positive effects which will accrue if the Applicant successfully achieves its goals and the proposed application of brodifacoum is considered a critical step to enable these goals to be achieved.

8.3.2 Part 2

Part 2 of the RMA sets out the purpose and principles of general application in giving effect to the Act. The RMA has a single purpose, which calls for an overall broad judgement of potentially conflicting considerations, the scale or degree of them in terms of their relative significance or proportion in promoting the sustainable management of natural and physical resources. The enabling elements of section 5 are not absolute or necessarily predominant and they must be able to co-exist with the purposes in paragraphs (a) to (c) of section 5.

Section 6 of the RMA identifies matters of national importance that I am required to recognise and provide for. I was advised by Ms Squire and Dr Solly that Sections 6(c) was relevant to this application and Dr Solly also considered that section 6(e) was relevant.

Section 6(c) of the RMA relates to the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna. Dr Solly advised me that the Sanctuary does provide habitat for indigenous fauna, including some species that are at-risk or threatened, however their presence does not necessarily mean that the Sanctuary is a 'significant' habitat for such fauna.³⁹ Ms Squire considered that the protection of the resources within the Sanctuary was a matter of national importance under section 6(c).⁴⁰ In response to questions Ms Squire considered that the longer term benefits for indigenous fauna, namely a higher abundance of native and endemic birds following the eradication of

³⁸ Section 42A report, paras 5.78 to 5.83

³⁹ Solly, EIC, para 86

⁴⁰ Section 42A report, 5.88 (reported incorrectly as section 6(e) RMA)

predators, meets the requirement to protect such values as set out in section 6(c) of the RMA. I agree with that assessment and, whilst it is arguable whether the indigenous fauna within the Sanctuary are in fact captured by the requirements of section 6(c), and despite the fact that there will be adverse effects on those fauna through deaths of non-target species, there is sufficient evidence that these fauna will not only recover but will increase in numbers over time compared to their current numbers within the Sanctuary. To this end I consider that the matters outlined in section 6(c) of the RMA will be provided for.

Section 6(e) of the RMA requires me to recognise and provide for the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga, Dr Solly notes that the application was served on all iwi with statutory acknowledgments over the Maitai River and one iwi, Ngati Kuia, lodged a submission which was in support of the application. The Ngati Kuia submission acknowledges the benefits that will be realised following the eradication of pests, including introduction of native fauna and flora, including vulnerable species. Ngati Kuia requests conditions be imposed that would require notification of the application of baits to it and the Applicant has volunteered such a condition.

Section 7 of the RMA lists 'other matters' that I must have particular regard to. Ms Squire considers the following section 7 RMA matters as being relevant to this application:⁴¹

(aa) the ethic of stewardship:

(c) the maintenance and enhancement of amenity values:

(d) intrinsic values of ecosystems:

(f) maintenance and enhancement of the quality of the environment:

(g) the finite characteristics of natural and physical resources:

Dr Solly considers that only clause (c), (d), and (f) are relevant, with clause (h) - the protection of the habitat of trout and salmon - unlikely to be relevant as the Brook Stream is not a significant or highly valued habitat for trout or salmon.⁴²

Whilst there will be some adverse amenity effects associated with the use of helicopters, these will be temporary and the effects moderate. If successful, the long term benefits in terms of restoration of indigenous fauna within the Sanctuary will result in an enhancement of its amenity values and the quality of the environment.

Section 8 of the RMA directs me to take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi). I have done so to the extent that those principles are consistent with the scheme of the RMA. I note that the Treaty of Waitangi is a partnership between the Crown and Maori, however in my view the Applicant has been respectful of the Treaty principles and has sought to reflect these principles in their consultation with tangata whenua.⁴³

⁴¹ Section 42A report, para 5.89

⁴² Solly, EIC, paras 89 to 92

⁴³ Refer AEE, Wildlands Report, para 8.1

I have sought to give effect to Part 2 of the RMA in making my decision on the application in light of the submissions received. In this regard, I find that the proposal will, over time, sustain the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations (section 5(2)(a)). Conditions imposed on the proposal will safeguard the life-supporting capacity of air, water, soil, and ecosystems (section 5(2)(b)). I am also satisfied that the comprehensive suite of conditions for the resource consents will ensure that potential adverse effects on neighbouring land and landowners, freshwater resources, and indigenous fauna will be avoided, remedied, or mitigated (section 5(2)(c)).

In overall terms I am satisfied that granting the consents is consistent with Part 2 of the Act and that the purpose of the RMA will be achieved.

9 Duration and Lapsing

The application seeks the flexibility to apply the baits either this coming winter or next winter and the Applicant has volunteered a condition would require the final application of baits to be no later than 30 September 2017. This date is effectively the lapsing period for the consents and I note that this is a shorter period than the default five years specified in the RMA but that it has been volunteered by the Applicant.

The duration of the consents included in the final set of volunteered conditions from the Applicant was for '24 months after the date upon which this consent commences'. However, this duration needs to be a longer period because another of the Applicant's volunteered conditions requires a final update to the Monitoring Report to be provided 2 years (24 months) after the initial Monitoring Report is to be provided, which is due after the last application of baits, not 24 months after the date of commencement. The duration (expiry) of the consent should therefore be the date that the final update to the Monitoring Report is provided to the Council.

10 Conditions

The section 42A report included a set of recommended conditions. The Applicant made changes to these conditions and these were attached to Mr McFadden's opening submission. A final set of volunteered conditions was included in the Applicant's Right of Reply and Ms Squire confirmed that these were 'agreed' conditions following caucusing. However, Ms Squire advised, in her further information provided, that there were two minor matters:

Firstly, the dotted line on the map submitted with the conditions in the Right of Reply indicating the location of the volunteered 50 metre setback does not extend along all of the length of the western section of the fence on the eastern 'tongue'. I have clarified this matter with the applicant and they agree to that line being extended to the northern tip of the eastern "tongue". Secondly, there is some repetition in draft conditions 27 and 28 circulated with the applicants Right of Reply. I recommend that condition 27 be deleted and the applicant has confirmed their agreement.

The Applicant has subsequently provided an amended map showing where the 50 m setback would apply.

I have carefully reviewed the Applicant's final suite of conditions and find them to be generally appropriate. However, despite my specific request⁴⁴ that all conditions should be checked to ensure they are unambiguous, the final set of conditions sent to me required significant rework on my part.

⁴⁴ Included in my Directions dated 7 April 2016

All references to condition numbers in the remainder of this section of this decision relate to the conditions attached as Appendix 2⁴⁵ to this decision report and not to any of the versions of conditions that have been provided to me.

The nature of the changes to the conditions I have made include:

- Minor formatting, grammatical, and cross-references corrections;
- Use of standard definitions for terms that are repeatedly used;
- Significant reorganisation of conditions into more appropriate condition groupings;
- Deletion of parts of conditions which were covered in other conditions; and
- Amendments to conditions and/or new conditions to address matters discussed in earlier sections of this decision report.

In terms of the final bullet point, I draw the reader's attention to the following which are the more significant changes to the conditions provided to me in the Applicant's Right of Reply.

- Condition 1 The duration of the consents is corrected to reflect the reporting timeframes specified in Condition 43. The final update to the Monitoring Report is to be provided 2 years after the Consent Holder submits its initial Monitoring Report (required by Condition 42), the latter must be provided any time within 6 months of the last application of baits. The duration (expiry) of the consents is therefore the date that the final update to the Monitoring Report is provided to the Council.
- Condition 2 Simplified condition by removal of reference to the two documents which already form part of the application.
- Condition 3 Simplified clause (a) and added new clauses (e) and (f) which require the Operational Plan to be certified before the consents are exercised and also that the activities are to be undertaken in accordance with the latest certified Operational Plan.
- Condition 4 This condition has been amended to require the independent person to certify the integrity of the Fence when its construction is completed and also before the first application of baits. The first application of baits cannot be until the integrity of the Fence is proven for at least a 6 week period. The condition requires the nominated independent person to be confirmed by the Council before the first inspection.
- Condition 5 A new condition which requires the Fence to be an effective barrier to mammalian pests for the duration of the consents. In addition, the condition requires the Consent Holder to undertake at least weekly inspections of the Fence (this being in addition to the inspections required by the independent person in accordance with Condition 38). Further, the condition requires remediation works to be undertaken if any inspection shows the effectiveness of the Fence has been compromised.
- Condition 9 Names of persons to be notified are now attached to the consents rather than embedded in the conditions.

⁴⁵ The conditions make frequent references to 'these consents' rather than 'this consent'. This is because more than one RMA 'type' of resource consent is being granted – discussed in more detail in Section 2 of this decision report

- Condition 14 Now combines the bait aerial loading rates and the maximum total quantity of baits into one condition.
- Condition 15 Revised wording of setback condition and reference to the new plan provided by the Applicant after the hearing.
- Condition 16 Condition amended to clarify that if there are any conflicts between the Code of Practice and any conditions then the conditions shall prevail.
- Condition 31 Minor change and the ongoing monitoring of the bait screen part of the condition has been removed and included as a separate condition in the Monitoring Conditions section as Condition 35.
- Condition 32 Condition amended to ensure sufficient observers are present during the application of baits along the western boundary so that there is full visual coverage of the entire boundary. In addition, the condition now also requires all practicable steps to be undertaken to immediately notify the adjacent landowners in the event that any baits fall on private land (in addition to having to make its best endeavours to access the land to collect such baits).
- Condition 33 New condition requiring an invitation to be extended to the adjoining landowners to be involved in the monitoring required by Condition 32.
- Condition 35 Bait screen monitoring (see discussion above on Condition 31).
- Condition 36 Minor rewording to require any onsite burning/burial of carcasses to be as far away as is practicable from any water bodies. The condition now also includes a requirement for carcass collection from the open areas on either side of the Fence, and an additional requirement that personnel who visit traps and tracking tunnels also need to collect any carcasses from any open areas that they encounter during such visits.
- Condition 38 Requirement for an independent person to inspect the Fence before the second and third applications of baits and to certify that it is fully effective as a barrier to mammalian pests. The second and third application of baits cannot be undertaken until such certification is provided. In addition, the condition requires additional inspections every two months for a period of 12 months following the last application of baits. A clause has been added which requires remedial works to be undertaken immediately if any inspection identifies that the Fence is not fully effective and a further inspection by the independent person then also needs to be undertaken.
- Condition 39 Condition amended to make it clearer and a requirement that laboratory supplied containers must be used to collect the water samples and also that the samples are to be analysed for brodifacoum.
- Condition 47 The periods when the Council may undertake a section 128 RMA review has been amended to enable it to review the conditions after each application of baits, and thereafter at three monthly intervals for the duration of the consents. Previously this condition only enabled the Council to review the consents annually but given the short duration of the consents, it should have the ability to undertake a review more frequently than annually. It should be noted that such reviews can only be initiated for a limited number of reasons and these are not mandatory reviews.

I am satisfied that these conditions are necessary and appropriate to avoid, remedy, or mitigate potential adverse effects identified in the evidence that was presented to me. I am also satisfied that the monitoring and reporting conditions will enable the ongoing effects of the proposal to be assessed over time.

12 Determination

Pursuant to the powers delegated to me by the Nelson City Council under section 34A of the RMA, I record that having read the application documents, the reporting officers' section 42A report, the submissions and the evidence presented before, at, and following the hearing, and having considered the various requirements of the RMA, I am satisfied that:

- i. The Applicant has undertaken a thorough assessment of the potential adverse effects that might arise from the storage and use of baits containing brodifacoum, by way of aerial and land based application methods;
- ii. The potential adverse effects of the proposal are either no more than minor or can be adequately avoided, remedied or mitigated by the imposition of conditions under section 108 of the RMA;
- iii. The effects of the proposal, when managed in accordance with those conditions, will not be inconsistent with the relevant statutory instruments and plans; and
- iv. Allowing the proposal to proceed will be consistent with the Purpose and Principles of the RMA.

I therefore **grant** the resource consents sought by the Brook Waimarama Sanctuary Trust for the proposal as listed in section 2 of this decision report subject to the imposition of the conditions set out in Appendix 2 for the reasons listed above and as further discussed in the body of this decision report.



Dr Rob Lieffering
Date: 11 May 2016

Appendix 1 Appearances

Hearings Commissioner

Dr Rob Lieffering

Applicant

Nigel McFadden – Legal Counsel

Dr David Butler – Chairman of the Brook Waimarama Sanctuary Trust

Dr Lionel Solly – Planner

Dr Des Smith – Scientist, Wildlands Consultants Limited

Dr Grant Harper – Scientist, Biodiversity Restoration Specialists Limited

Raewyn Empson – Manager Conservation, Research, Learning and Experience, Zealandia

Reporting Officers

Rosalind Squire – Consultant Planner

Dr Louis Tremblay – Environmental Toxicologist, Cawthron Institute

In Attendance

Kathy Mardon – Hearings Administrator

Submitters

Stuart Walker, representing Shirley Simpson

Dr Arnja Dale – Chief Scientific Officer, Royal New Zealand Society for the Prevention of Cruelty to Animals Incorporated (RNZSPCA), in support of Mrs Simpson

Dr Tamika Simpson

Richard Simpson, in support of Dr Simpson

Waiata performed by Mr C St Johanser, in support of Dr Simpson

Richard Sullivan

Bryce Buckland – Trapper, in support of Mr Sullivan

Craig Simpson

Appendix 2 Conditions and plans

Definitions and Abbreviations:

For the purposes of these consents and conditions, the following definitions and abbreviations shall apply.

Baits	Cereal baits containing brodifacoum which comply with the requirements of Condition 13
Fence	The pest proof perimeter fence which encompasses the Brook Waimarama Sanctuary and also all swales, culverts, and operational gates along its entire length
GPS	Global positioning system
kg	Kilograms
kg/ha	Kilograms per hectare
NZFSA Code of Practice	The most recent edition of the Code of Practice: Aerial and Hand Broadcast Application of Pestoff® Rodent Bait 20R for the Intended Eradication of Rodents from Specified Areas of New Zealand prepared for the New Zealand Food Safety Authority
ppm	Parts per million
Sanctuary	The Brook Waimarama Sanctuary within the pest proof perimeter Fence

General Conditions

- 1 The last application of baits shall be completed no later than 30 September 2017. These consents shall expire on the date the final update to the Monitoring Report is provided to the Council as required by Condition 43.
- 2 The Consent Holder shall exercise these consents in accordance with the application lodged with the Council, and in accordance with relevant legislation. Where there is any actual or apparent conflict between the application and any conditions of these consents, the conditions shall prevail.

Advice Note: The application records that monitoring will be undertaken after the first and second applications of baits and the monitoring results after the second application of baits will inform the decision as to whether a third application of baits is required.

Operational Plan Certification

3

- (a) A Multispecies Pest Eradication Operational Plan shall be submitted to the Council's Manager Consents and Compliance for certification at least 20 working days prior to the intended date of the first application of baits. Certification shall be provided by the Council's Manager Consents and Compliance if the submitted document:
 - i) Is in general accordance with the draft "Multispecies Pest Eradication Operational Plan" prepared by P McClelland – dated September 2015 submitted with the application;

- ii) Is consistent with all relevant conditions of these consents; and
 - iii) Contains an appropriate response plan for any breach of the Fence to minimise the risk of poisoned animals leaving the Sanctuary.
- (b) The Consent Holder may commence the first application of baits in accordance with the submitted Multispecies Pest Eradication Operational Plan unless the Manager Consents and Compliance advises the Consent Holder within 10 working days of its lodgement that they refuse to certify it, and the reasons why.
 - (c) Should the Multispecies Pest Eradication Operational Plan not be certified, the Consent Holder shall submit a revised Multispecies Pest Eradication Operational Plan and clause (b) of this condition shall apply to that resubmitted Plan.
 - (d) Any certified Multispecies Pest Eradication Operational Plan may be varied by the Consent Holder, however any variation shall follow the process set out in (a) to (c) of this condition.
 - (e) These consents shall not be exercised until the Multispecies Pest Eradication Operational Plan has been certified by the Council's Manager Consents and Compliance.
 - (f) The Consent Holder shall undertake the activities authorised by these consents in accordance with the latest certified Multispecies Pest Eradication Operational Plan.

Integrity of Fence

- 4 The first application of baits shall not occur until the Consent Holder has proven that the Fence is fully effective as a barrier to mammalian pests for a continuous period of at least 6 weeks after its construction is completed. To prove the effectiveness of the Fence the Consent Holder shall engage the services of an independent person experienced in the construction and maintenance of pest-proof fences to inspect it.

Details on the experience of the nominated independent person shall be submitted to the Council's Manager Consents and Compliance at least one week prior to the intended first inspection of the Fence. The first inspection of the Fence shall not be undertaken until the Council's Manager Consents and Compliance has confirmed in writing that the nominated person has met the independence and experience requirements of this condition.

The independent person shall inspect the Fence and certify that it is fully effective as a barrier to mammalian pests after completion of construction of the Fence and also following the 6 week proving period specified in this Condition. A copy of these certifications shall be provided to the Council's Manager Consents and Compliance prior to the first application of baits.

Advice Note: Condition 38 also requires ongoing inspections and certification of the Fence by the independent person before the second and third applications of baits and also for a 12 month period following the last application of baits.

- 5 The Consent Holder shall ensure that the Fence is fully effective as a barrier to mammalian pests for the duration of these consents. In addition to the inspections and certification required by Conditions 4 and 38, the Consent Holder shall undertake its own inspections of the Fence at least weekly to ascertain its effectiveness. Written records of these inspections shall be kept and these shall be made available to the Council's Monitoring Officer upon request. If any inspection identifies that the Fence is not fully effective as a barrier to mammalian pests then the Consent Holder shall immediately undertake any work required to ensure its effectiveness is reinstated and provide evidence of such works to the Council's Monitoring Officer within one week of the works being completed.
- 6 The Consent Holder shall, prior to the first application of baits, establish a bank account with a registered bank in New Zealand and maintain a current balance of not less than \$50,000 in the account for the duration of these consents. The funds in this account shall only be used for the purpose of undertaking works to ensure the integrity of the Fence is maintained during and following the application of baits. The Consent Holder shall provide details of the account to the Council's Manager Consents and Compliance, and authorise the Council to engage with the Bank to ensure the continued retention of the account credit balance for the duration of these consents.

Notification of Application of Baits

- 7 The Consent Holder shall appoint a representative(s) who shall be the Council's principal contact person(s) in regard to matters relating to these consents. The contact details of the nominated representative(s) shall be forwarded to the Council's Monitoring Officer prior to the first application of baits.
- 8 The Consent Holder or appointed representative(s) shall advise the Council's Monitoring Officer in writing, at least 5 working days prior to the first application of baits and 3 working days prior to the second and third applications of baits, so that monitoring of these conditions can be undertaken. Please advise consent number RM155046.
- 9 The Consent Holder shall give notice of not less than 20 working days prior to the first application of baits to iwi, the Nelson District Health Board, the Nelson City Council, the owners/occupiers of land immediately adjacent to the Sanctuary, and the public that the Sanctuary will be closed. The Consent Holder shall also give notice to the owners/occupiers of land immediately adjacent to the Sanctuary two days prior to each application of baits.
Advice note: The names and addresses of the iwi and adjacent owners/occupiers, and the Nelson City Council to be notified pursuant to this condition are included in Attachment 1 to these consents.
- 10 The notification requirement under condition 9 shall, as a minimum, be given by way of adverts in the Nelson Mail and The Leader (Nelson Edition). The Consent Holder shall ensure warning signs identifying the proposed use of brodifacoum are erected in a prominent place at the single public access point and around the boundary of the Sanctuary at regular intervals and at all recreational access points around the Fence at least 10 working days prior to the first application of baits.
- 11 The signs referred to in Condition 10 shall be checked to ensure that they are all still in place on the morning of each application of baits and every 3 days between and following the third application until the decision is made that the Sanctuary will be re-opened to the public.
- 12 The signs referred to in Condition 10 shall comply with the NZFSA Code of Practice.

Application of Baits

- 13 The baits applied shall consist of 10 millimetre (2 gram) Pestoff 20R cereal rodent baits containing 20 ppm brodifacoum. The baits shall be dyed green to deter birds and shall not contain lure or "Bitrex".
- 14 These consents only authorise a one-off eradication operation comprising up to three aerial bait applications (Applications 1, 2, and 3) each occurring a minimum of 2 weeks apart during a forecasted fine weather period of at least 3 days. The three applications of baits shall be in general accordance with the following aerial loading rates:
- | | |
|-----------------------------|----------|
| Application 1 | 18 kg/ha |
| Application 2 | 9 kg/ha |
| Application 3 (if required) | 9 kg/ha |
- The total cumulative aerial loading rate of all three applications shall not exceed 36 kg/ha and the total mass of the baits applied aurally shall not exceed 26.5 tonnes.
- 15 No baits shall be applied aurally within the yellow hatched area shown on the plan entitled 'Aerial Brodifacoum Operation Helicopter Setback', included as Attachment 2 to these consents, this being a setback distance of 50 metres inside the Fence. For all other parts of the Sanctuary a setback distance inside the Fence of at least 15 metres shall apply. Baits may only be applied by hand within the setback areas.
- 16 The Consent Holder shall ensure the activity shall be undertaken in compliance with the NZFSA Code of Practice. Where there is any actual or apparent conflict between the contents of this Code of Practice and any conditions of these consents, including the certified Multispecies Pest Eradication Operational Plan, the conditions and contents of the Operational Plan shall prevail.
- 17 All pilots involved in the operation shall hold the relevant ratings for aerial sowing under the Civil Aviation Regulations 1953, and appropriate Ministry of Transport Regulations for the aerial application of brodifacoum baits.
- 18 The Consent Holder shall ensure all aircraft used for the aerial application of baits are fitted with, and the operator is familiar with and utilises, a Differential GPS (or equivalent system) to aid in accurate coverage of the Sanctuary. This system shall incorporate a data recording system from which the data are able to be retrieved on completion of the application and submitted to the Council's Monitoring Officer in accordance with Condition 21.
- 19 The flight paths of aircraft applying the baits shall not overfly private landholdings on the western boundary of the Sanctuary when accessing the Sanctuary.
- 20 The aircraft used to apply the baits shall be flown using line of sight and with a directional bucket using a half swath when they are within 25 metres of the Fence.
- 21 Within 5 working days following completion of each of the three applications of baits, the Consent Holder shall provide the Council's Monitoring Officer a map, generated from the GPS flight logs recorded during the application. This map shall provide details of application area boundaries and the areas within which the baits were applied.
- 22 The Consent Holder shall ensure that emergency spill kits for fuel are provided at the loading site and that persons trained in the use of those kits are present at the loading site at all times when the site is in use for bait loading purposes.

- 23 The Consent Holder shall ensure that the contractors involved in the fuel supply and aircraft refuelling, bait supply, and application operations shall comply with health, safety and risk management procedures that are in accordance with the requirements of the Hazardous Substances and New Organisms Act 1996.
- 24 The Consent Holder shall ensure that a spill team is on hand at the loading site for the entire time that baits are being loaded to deal with any baits accidentally spilled.
- 25 The loading site shall be kept dampened down during all loading and helicopter operations to minimise the generation of dust beyond the site.
- 26 At the completion of each application, all baits shall be removed from the loading site. The Consent Holder shall ensure all waste material (including any discernible bait remains, bags, pallets and wrapping materials used in the transportation of the baits to the aircraft loading site) are disposed of in accordance with the guidelines in the NZFSA Code of Practice as soon as practicable following completion of the operation (and no more than 24 hours following the completion of the operation) and are disposed of to a landfill approved to receive such waste.
- 27 In the event of any accidental spill, due to human error or mechanical failure, of more than 50 kg of baits onto land or into water, the Consent Holder shall immediately notify the Council's Monitoring Officer and the Nelson District Health Board of the event and shall take all reasonable steps as determined by the Council's Monitoring Officer to mitigate the effects of the discharge and prepare a report as soon as practicable to the Council's Monitoring Officer outlining the steps taken.
- 28 If any aircraft or other vehicle carrying baits discharges its load in a manner not contemplated in the exercise of these consents, the Consent Holder shall notify the Council's Monitoring Officer as soon as practicable, and shall take all reasonable steps as determined by the Council's Monitoring Officer to mitigate the effects of the discharge and prepare a report as soon as practicable to the Council's Monitoring Officer outlining the steps taken.
- Advice Note: The Consent Holder is advised that any discharge that does not meet the requirements of these consents (e.g. in the event of a spill), will not be authorised and would be liable to enforcement action.*
- 29 The Consent Holder shall ensure that the certified Multispecies Pest Eradication Operational Plan, all emergency equipment, and an approved Health and Safety Plan are kept on site at all times and are readily available during the exercise of these consents. All personnel associated with the application of baits shall be made aware of the content and implementation of these plans and the location of emergency equipment.
- 30 The Consent Holder shall arrange for immediate humane dispatch of any wildlife in the event that any such wildlife is found suffering from the effects of the applied baits.
- 31 A bait screen shall be placed in and across the Brook Stream upstream of the dam/fence where the stream exits the Sanctuary to catch any baits washed downstream. The screen shall be designed by a Chartered Professional Engineer and it shall be installed prior to the first application of baits under the supervision of the designing Engineer.

Monitoring Conditions

- 32 During each application of baits to areas which adjoin private landholdings on the western boundary of the Fence, the Consent Holder shall ensure that personnel are present during the aerial application of baits to assess if any baits are discharged outside of the fenced area. The Consent Holder shall ensure that a sufficient number of monitoring personnel are stationed along this boundary so that there is visual coverage of all parts of this boundary during the application of baits. If any baits fall outside of the Fenced area on land leased by the Consent Holder or land owned by the Nelson City Council then personnel shall collect those baits and place them back inside the Sanctuary. If any baits fall on privately owned land then the Consent Holder shall take all practicable steps to notify the owner immediately and shall make their best endeavours to access that land to collect the baits and place them back inside the Sanctuary.
- 33 The Consent Holder shall invite the owners/occupiers of land immediately adjacent to the Sanctuary to be involved in the monitoring required to be undertaken in accordance with Condition 32. The owners/occupiers, or their nominated representative(s), may be involved either as active monitoring personnel or as observers. This invitation shall be given at least 20 working days before the first application of baits, and at least two days before the second and third applications of baits.
- Advice Note: The owners/occupiers of land immediately adjacent to the Sanctuary were submitters on the application and indicated at the hearing that they would appreciate being invited to be involved in monitoring the aerial applications of baits. The timeframes in this condition are the same as those specified in Condition 9 and therefore notification and invitation can be undertaken concurrently.*
- 34 The Consent Holder shall ensure that the outside perimeter of the entire Fence is checked immediately following each application of baits. If any baits are found outside the fenced area on land leased by the Consent Holder or land owned by the Nelson City Council then the Consent Holder shall collect those baits and place them back inside the Sanctuary. If any baits are found on privately owned land then the Consent Holder shall make its best endeavours to access that land to collect the baits and place them back inside the Sanctuary.
- 35 The bait screen required to be installed and maintained in accordance with Condition 31 shall be checked for bait and carcass capture at least twice on the day of each bait application and thereafter each day for 2 weeks. In addition, the screen shall be checked daily for a period of 1 month after any rainfall event with a 1 in 20 year or greater intensity as measured at the Third House rain gauge. All captured bait shall be collected and placed back within the Sanctuary away from water bodies, and carcasses disposed of as set out in condition 36.
- 36 Opportunistic carcass searching shall be undertaken for 14 days following each application of baits and any carcasses found and not given to the Department of Conservation for toxin analysis shall either be buried/burnt on site as far away as is practicable from any water bodies or disposed of at a landfill authorised to accept such carcasses. This carcass searching shall occur in and around water bodies, the open grassland areas, and public tracks within the Sanctuary as well as around the open areas on both sides of the Fence. Opportunistic carcass searching shall also be undertaken in any other open areas that are encountered by personnel during their visit to traps or tracking tunnels within the Sanctuary.

37 The Consent Holder shall undertake bait break down monitoring trials commencing immediately after the completion of the last application of baits to assess the state and rate of bait break down over time in accordance with the Craddock 2004 scale, a copy of which is attached to these consents as Attachment 3.

38 The approved independent person referred to in Condition 4 shall inspect the Fence before the second and third applications of baits to certify that the Fence is fully effective as a barrier to mammalian pests. A copy of each certification shall be submitted to the Council's Manager Consents and Compliance prior to the second and third applications of baits, respectively. In addition, the independent person shall inspect the Fence at no less than two monthly intervals after the last application of baits for a period of 12 months to certify that the Fence continues to be fully effective as a barrier to mammalian pests over that 12 month period. A copy of each certification shall be submitted to the Council's Manager Consents and Compliance within one week of each inspection.

If any inspection identifies that the Fence is not fully effective as a barrier to mammalian pests then the Consent Holder shall immediately undertake any work required to ensure its effectiveness is reinstated and a further inspection and certification shall be undertaken by the approved independent person and that re-certification submitted to the Council's Manager Consents and Compliance within one week of the inspection.

Advice Note: Condition 4 also requires an inspection and certification to be undertaken to prove the Fence's integrity for a continuous period or not less than 6 weeks prior to the first application of baits.

39 The Consent Holder shall undertake water quality monitoring as follows:

- (a) Water samples shall be collected from the Brook Stream at the point where the stream leaves the Sanctuary and also a point 800 metres downstream of the Sanctuary ('the monitoring points');
- (b) During each application of baits, water samples shall be collected at both the monitoring points immediately prior to application of baits and then at 12, 24, and 48 hour intervals following the application of baits.
- (c) A further water sample shall be collected from both the monitoring points 2 weeks after the final application of baits.
- (d) Water samples shall be collected using laboratory supplied containers and shall be sent under chain of custody to an independent testing laboratory where the water samples shall be analysed for brodifacoum. The detection limit for the testing shall be 0.02 parts per billion (0.02 µg/L) or better.
- (e) The Consent Holder shall supply the laboratory results to the Council's Manager Consents and Compliance within 5 days of their receipt.

40 The Consent Holder shall provide a report on the post operational inspection of the loading site, and bait monitoring outside the Fence to the Council's Monitoring Officer within 5 working days of each application of baits.

41 Within 20 working days following the final application of baits the Consent Holder shall provide written confirmation to the Council's Monitoring Officer that the operation was undertaken in accordance with the details submitted with the application and with the conditions of these consents. This report shall be reviewed by the Monitoring Officer who shall advise the Consent Holder of any remedial action required if the operation was not undertaken in accordance with the information submitted with the application or in accordance with the conditions of these consents.

- 42 The Consent Holder shall prepare a Monitoring Report detailing the results of the Monitoring Programme outlined in the application. The report shall be provided to the Council's Monitoring Officer within six months following the last application of baits, and shall include the following:
- (a) Whether the aerial application was successfully completed;
 - (b) Bait monitoring, including bait breakdown monitoring;
 - (c) Results of the water quality monitoring;
 - (d) Evidence establishing the density of bait distribution using GPS data gathered from helicopter flights within the operational area;
 - (e) Evidence of the number of target and native species collected; and
 - (f) Observation of (and evidence on) the mortality of non-target threatened native and endemic species (to the extent it is available).
- 43 At six monthly intervals for two years after the provision of the Monitoring Report required by Condition 42, the Consent Holder shall provide updates on items (b), (c), (e), and (f) of Condition 42 to the Council's Monitoring Officer as well as evidence documenting the recovery of native and endemic species within the Sanctuary.
- 44 The Consent Holder shall ensure that a local veterinary, staff member, or contractor authorised in the administration of vitamin K antidote is contracted to be available from the date of the first application of baits until the reopening of the Sanctuary to administer vitamin K antidote to treat any poisoned native or endemic birds (or any other poisoned wildlife). Any decision to administer vitamin K antidote shall be made in consultation with the Department of Conservation.
- 45 From the date of the first application of baits until reopening of the Sanctuary, the Consent Holder shall ensure that a local doctor is on call and able to administer vitamin K antidote and treat any person poisoned as a result of the applications of baits. The contact details of the local doctor shall be submitted to the Council's Monitoring Officer prior to the first application of baits.

Reopening of the Sanctuary

- 46 The Consent Holder shall close the Sanctuary to public entry during and in between the applications of baits and also for 120 days after the last application of baits, or when bait breakdown is established by the monitoring trials required by condition 37 have reached 'Condition 6' on the Craddock scale (refer Attachment 3), whichever is the sooner.

Review Condition

- 47 For the purposes of, and pursuant to Section 128 of the Resource Management Act 1991, the Council may review the conditions of these consents after each application of baits, and thereafter at three monthly intervals, for any of the following purposes:
- (a) To modify existing conditions of consents relating to the effects of the activity on the environment;
 - (b) To require the Consent Holder to adopt the best practicable option to mitigate any adverse effect upon the environment, arising from the generated effects of the activity; and
 - (c) If the Council deems that it is necessary to do so in order to deal with any adverse effect on the environment which may arise from the exercise of these consents, and which is appropriate to deal with at a later date.

General Advice Notes

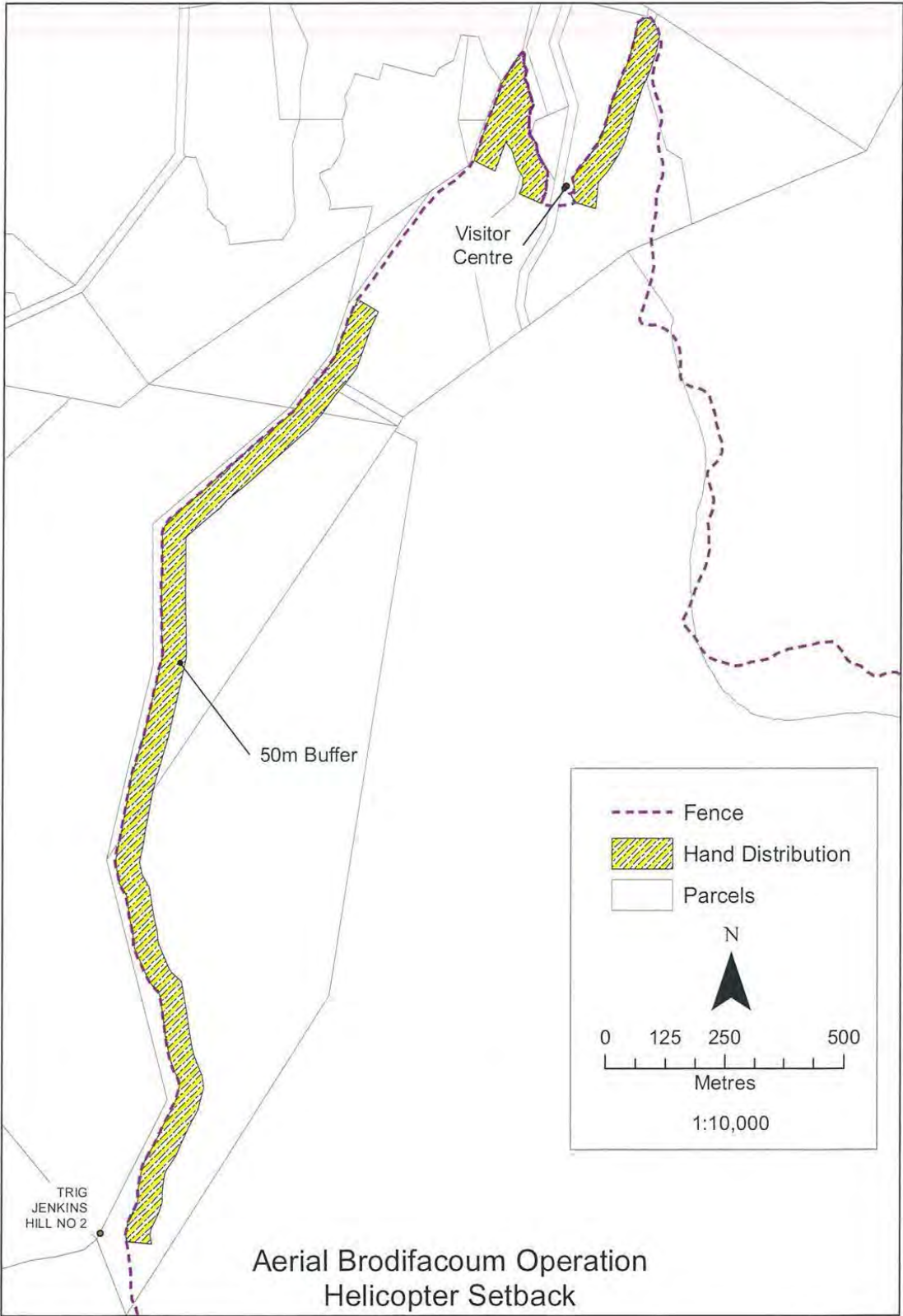
1. This is not a building consent, and the Consent Holder shall meet the requirements of the Council for all Bylaws, Regulations and Acts.
2. These resource consents authorise only the activities described above. Any matters or activities not consented to by these consents or covered by the conditions above must either:
 - (a) comply with all the criteria of a relevant permitted activity in the Nelson Resource Management Plan (NRMP); or
 - (b) be allowed by the Resource Management Act 1991; or
 - (c) be authorised by a separate resource consent.
3. These consents are granted to the Consent Holder, but Section 134 of the Act states that land use consents “attach to the land”, and accordingly, may be enjoyed by any subsequent owners and occupiers of the land. Therefore, any reference to “Consent Holder” in any conditions shall mean the current owners and occupiers of the subject land. Any new owners or occupiers should therefore familiarise themselves with the conditions of these consents, as there may be conditions that are required to be complied with on an ongoing basis.
4. The Consent Holder should note that these resource consents do not override any registered interest on the property title.
5. A monitoring charge of \$100 has been included in your invoice, as conditions of consent requiring monitoring have been imposed. This charge covers the costs involved in the first hour of monitoring compliance with the consent conditions. Where additional monitoring costs are required to determine that conditions have been met, these will be charged as provided in the Council’s Fees and Charges Schedule. Please contact the Council’s Monitoring Officer, phone (03) 546 0381, when work commences on these consents, so that monitoring can be carried out. Please quote the consent number, RM155046.

Attachment 1 – Persons to be Notified

IWI			
Name	Postal Address	Email	
Ngati Apa ki Te Ra To Trust	PO Box 708 Blenheim 7240	office@ngatiapakiterato.iwi.nz	
Te Runanga o Ngati Kuia	PO Box 968 Nelson 7040	Raymond@ngatikuia.iwi.nz	
Ngati Toa Rangatira	PO Box 50355 Porirua 5240	m.rei@ngatitoea.iwi.nz	
Rangitane o Wairau Settlement Trust	PO Box 883 Blenheim 7240	Richard@rangitane.org.nz	
Tiakina Te Taiao Ltd	PO Box 1666 Nelson 7040	frank@tiakina.co.nz	
<i>The following 4 iwi are part of the Tiakina Group</i>			
Te Atiawa o Te Waka-a-Maui	PO Box 340 Picton 7250	rm@teatiawatrue.co.nz	
Ngati Rarua Settlement Trust	PO Box 1026 Blenheim 7240	admin@ngatirarua.co.nz	
Te Pataka o Ngati Koata	PO Box 1659 Nelson 7040	projects@koata.iwi.nz	
Ngati Tama ki Te Waipounamu Trust	PO Box 914 Nelson 7040	tari@ngati-tama.iwi.nz	
ADJACENT LANDOWNERS			
Name	Postal Address	Email	Physical Address
Shirley & Barry Simpson	PO Box 117 Nelson 7040	mcdandosfarm@xtra.co.nz	584 Brook Street, Nelson 7010
Tamika Simpson	PO Box 117 Nelson 7040	simpsontamika@gmail.com	584 Brook Street, Nelson 7010
Richard Sullivan	PO Box 117 Nelson 7040	Richard.sullivan@gmail.com	584 Brook Street, Nelson, 7010

Craig Simpson	PO Box 1241 Nelson 7040	craigsimpson@gmail.com	594 Brook Street, Nelson 7010
David and Donna Butler	588 Brook Street, Nelson 7010		588 Brook Street, Nelson 7010
Nelson City Council	C/- Alec Louverdis, Group Manager, Infrastructure PO Box 645, Nelson 7040	Alec.louverdis@ncc.govt.nz	

Attachment 2 – Setback Distance Map



Attachment 3 – Craddock Scale for Breakdown of Baits

- **Condition 1:** Fresh Pellets/Pellets not discernable from fresh bait.
- **Condition 2:** Soft pellets. <50% of pellet matrix is or has been soft or moist. Bait is still recognisable as a distinct cylindrical pellet, however cylinder may have lost its smooth sides. <50% of bait may have mould. Bait has lost little or no volume.
- **Condition 3:** Mushy Pellet. >50% of bait matrix is or has been soft or moist. <50% of pellet has lost its distinct cylindrical shape. >50% of bait may have mould. Bait may have lost some volume.
- **Condition 4:** Pile of Mush. 100% of bait matrix is or has been soft or moist. Pellet has lost distinct cylindrical shape and resembles a pile of mush with some of the grain particles in the bait matrix showing distinct separation from the main pile. >50% of bait may have mould. Bait has lost some volume.
- **Condition 5:** Disintegrating Pile of Mush: 100% of bait matrix is or has been soft or moist. Pellet has completely lost distinct cylindrical shape and resembles a pile of mush with >50% of the grain particles in the bait matrix showing distinct separation from each other and the main pile. >50% of bait may have mould. Bait has definitely lost a significant amount of volume.
- **Condition 6:** Bait Gone: Bait is gone or is recognisable as only a few separated particles of grain or wax flakes.

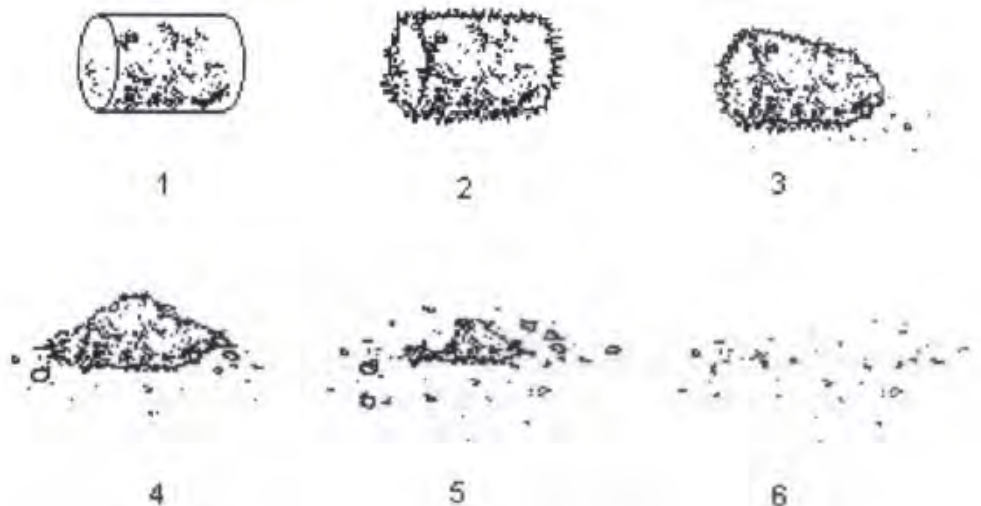


Illustration of typical bait condition at each ordinal score used in the trial
(figure reproduced from Craddock, 2004)