

# AUCKLAND COUNCIL



## Decision following the hearing of an application for resource consent

**SUBJECT:** Application for resource consent made pursuant to section 88 of the Resource Management Act 1991 by Auckland Council to discharge cereal baits containing 20mg/kg brodifacoum to the air, land and water, including the coastal marine area, of Shakespear Open Sanctuary at Whangaparaoa Peninsula. The Hearing was held on 13<sup>th</sup> & 14<sup>th</sup> December 2010.

**CONSENT, PURSUANT TO SECTIONS 104, 104B & 104D  
OF THE RESOURCE MANAGEMENT ACT, IS GRANTED.  
THE FULL DECISION IS SET OUT BELOW**

<b>Hearing Panel:</b>	The Application was heard by Hearing Commissioners, consisting of:
	Ms Jennie Hoadley            Chairperson Mr Barry Kaye Mr Les Simmons

<b>APPEARANCES:</b>	
<b>For the applicant</b>	Auckland Council            Legal Counsel (Buddle Findlay) Pat represented by:            Mulligan & Vanessa Evitt Mr Matt Maitland            Project Manager and Open Sanctuary Co-ordinator Northern Parks Dr Paul Craddock            Scientist Mr Tim Lovegrove            Scientist Dr Roger Grace              Marine Scientist Ms Diana Bell                Planner

<b>Council Officers:</b>	Ms Ammemieke Van Dam    Team Leader Rural and Wastewater Mr Andrew Noble            Reporting Officer Mr Alastair Jewell            Principal Planner Ms Maea Petherick            Committee Secretary - Hearings (Monday) Ms Theresa Pearce (Tuesday)
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<b>Submitters:</b>	Loes Cohen (Paul)
	Shakespear Open Sanctuary Society (Alan Parker)
	Friends of the Earth
	Barry & Dalwyn Luckman
	Lisa Er

## APPLICATION DESCRIPTION

The applicant seeks resource consent to undertake an aerial application of poison baits (cereal baits containing 20mg/kg brodifacoum to the air, land and water, including the coastal marine area) within Shakespear Open Sanctuary (SOS) in order to eradicate rodents. The proposal requires discharges to air, land, water and the coastal marine area (CMA) of SOS in accordance with section 15 of the Resource Management Act 1991. The proposal is to enhance the conservation and recreational values of SOS and to restore the endemic ecosystems of SOS for future generations.

### Application and Property Details

<b>File Reference</b>	22112
<b>Application Number (s):</b>	38472 & 38473
<b>Site Address:</b>	
<b>Applicant's Name:</b>	
<b>Lodgement Date:</b>	
<b>Hearing Commencement:</b>	9.30am (each day)
<b>Hearing Panel's Site Visit:</b>	
<b>Hearing Closed:</b>	10.00 am Thursday 23 December 2010

## INTRODUCTION

This decision is made on behalf of the Auckland Council (AC) by Ms Jennie Hoadley, Mr Les Simmons and Mr Barry Kaye, appointed and acting under delegated authority pursuant to sections 34 & 34A of the Resource Management Act 1991 (RMA).

The applications were publicly notified on 27 September 2010. A total of 39 submissions (including the late submissions) were received, with 4 in support, and the rest in opposition.

Written approvals were obtained from the New Zealand Defence Force and Watercare Services Limited. These two organisations own those parts of the subject site not owned by the Auckland Council.

## LATE SUBMISSIONS

Pursuant to section 37 of the Resource Management Act 1991, the time for receiving submissions was extended to accept late submissions from:

- Alma Rae, 135a2 Rocking Horse Rd, Christchurch
- Patricia Court, 41b Shakespear Rd, Army Bay
- Margaret Parker, 26 Red Hibiscus Rd, Stanmore Bay

These submissions were received no later than three days after the closing period and the applicant supported the decision to accept them. By accepting these submissions the interests of the community will be met in achieving an adequate assessment of the effects of the proposal and no unreasonable delay in the processing of the application will result.

## REPRESENTATIONS AT HEARINGS

The details of the proceedings of the hearing, including the identification of those present, the procedural rulings and the evidence presented, are set out in this decision.

The Council officer's report was circulated to the applicant, the submitters and the members of the hearing panel prior to the hearing. The officer's report was taken as read.

This decision contains the findings of the Commissioner's deliberations on the resource consent application and has been prepared in accordance with section 113 of the Resource Management Act 1991.

## PROCEDURAL MATTERS

At the conclusion of the hearing the Commissioners adjourned the hearing to enable a revised set of recommended conditions to be prepared by the applicant. The revised conditions were then circulated to those submitters who had attended the hearing to enable them to comment on them. This process took place by email between the parties and was concluded on the 22nd of December 2010. The revised conditions and the submitters' comments were duly received by the commissioners on 23 December and the hearing was closed at 10.00am on 23 December 2010.

## SUMMARY OF PROPOSAL AND ACTIVITY STATUS

### Proposal

In summary the proposal is to discharge cereal baits containing 20mg/kg brodifacoum to the air, land and water, including the coastal marine area, of Shakespear Open Sanctuary at Whangaparaoa Peninsula.

The proposal is fully described on page 3 in the opening legal submissions at section 4.

A key aspect of the proposal is that any discharge outside of the site boundaries or within the coastal marine area would be unintentional, but is considered inevitable, particularly in relation to the coastal marine area because of the aerial application of the bait by helicopter.

### Activity Status

The aerial application of brodifacoum bait in land and water is a discretionary activity under the Regional Plan: Air, Land and Water. The application of brodifacoum bait in the coastal marine area is a non-complying activity under the Regional Plan: Coastal.

The proposal is overall a non-complying activity.

## RELEVANT STATUTORY PROVISIONS CONSIDERED

In accordance with section 104 of the Resource Management Act 1991, the Commissioners have had regard to the relevant statutory provisions including the relevant sections of Part 2 of the RMA and sections 104, 104B, 104D, 105, 107 and 108.

## RELEVANT POLICY STATEMENTS AND PLAN PROVISIONS CONSIDERED

In accordance with section 104(1)(b)(i)-(iv) of the Resource Management Act 1991, the Commissioners have had regard to the relevant policy statements and plan provisions of the following documents:

1. The New Zealand Coastal Policy Statement 2010.
2. The relevant provisions of the Auckland Regional Policy Statement as set out in section 6.6 of the Section 42A report.
3. The relevant provisions of the Auckland Regional Plans as set out in section 6.7 of the Section 42A report.
4. The Proposed Rodney District Plan 2000.

The Commissioners also considered the following other matters to be relevant and reasonably necessary to determine the application in accordance with section 104(1)(c).

1. The Hauraki Gulf Marine Park Act 2000.
2. The Auckland Regional Pest Management Strategy 2007-2013.
3. The United States Environmental Protection Agencies Risk Mitigation Decision for Ten Rodenticides, May 28 2008.
4. 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, New Zealand Food Safety Authority, June 2006.
5. Current agreed best practice for rat eradication - aerial broadcasting poison bait, Department of Conservation, August 2010.

## SUMMARY OF EVIDENCE HEARD

The evidence presented at the hearing responded to the issues and concerns identified in the officer's recommending report, the application itself and the submissions made to the application.

The evidence presented by the **applicant** was provided in writing and read at the hearing and is summarised below. The key aspects of the evidence presented are contained within the findings on the principal issues in contention set out below.

Mr Patrick Mulligan presented opening legal submissions.

Evidence was presented by:

- (a) Mr Matt Maitland (Open Sanctuary Co-ordinator Northern Parks and Project Manager), who provided an overview of the Proposal, with particular focus on project planning and consultation plus an overall assessment of effects;
- (b) Dr Paul Craddock (Senior Consultant), who addressed toxicology issues and in particular the biological persistence of brodifacoum and biological pathways and the toxic loading and degradation of the compound brodifacoum in the Shakespear environment;
- (c) Mr Tim Lovegrove (Scientist), who discussed wildlife impacts and benefits and in particular the historical perspective and the significance and potential of Shakespear as an open sanctuary, the effects of introduced mammals on the indigenous flora of Shakespear and the benefits of their removal, the effects of introduced mammals on the indigenous fauna of Shakespear and the benefits of their removal and an assessment of the effects of the operation on key non-target species at Shakespear;
- (d) Dr Roger Grace (Consultant Marine Scientist), who addressed marine issues and in particular the long term changes in fish and crayfish populations, and habitats, at Tawharanui Marine Park, the specific changes over the period of brodifacoum drops at Tawharanui, and in particular whether any differences have been identified in the sites located away from the drop zone as compared with those sites adjacent to the drop zone, before and after the drop, commented on historic changes at Shakespear/Tiritiri and

perceptions of the current status and the similarities between Tawharanui Marine Park and proposed Shakespear Open Sanctuary;

- (e) Ms Diana Bell (Planner), who addressed the planning context and discussed the relevant planning documents.

The evidence presented by the **submitters** is summarised as follows. The key aspects of the evidence presented are contained within the findings on the principal issues in contention set out below.

Ms Lisa Er presented written evidence. She lives in Titirangi and has a beach house at Omaha. She supported the protection of the environment and the intention to provide an open sanctuary at Shakespear Regional Park. Her concerns were in relation to the proposed aerial application of brodifacoum and she challenged the science behind the proposal. She acknowledged that she had no scientific qualifications or experience and that her concerns were, in her opinion, supported by the material she had researched from the internet. Her overall concern was that she was not convinced that the proposed activity could be undertaken safely without adverse effects on the receiving environment. She requested that consent be refused.

Mr Barry Luckman presented oral evidence. He owns a property at Army Bay approximately a kilometre from the subject site. He was primarily concerned that brodifacoum would enter the marine environment and that the rain water tanks on his new house at Army Bay would also be affected. He preferred that ground based methods be used as this locality is not remote from surrounding residential activities. He requested that consent be refused.

Mr Paul Cohen presented written evidence. He lives on Waiheke Island and was totally opposed to what he described as "indiscriminate aerial use of poisons." He set out in detail the reasons why he opposed the proposal, with reference to the Section 42A report and with much of his material sourced from the internet research he had undertaken. His overall concerns related to the aerial application that was proposed and he considered that there are alternatives to aerial poisoning that should be used, such as more humane trapping options that are available. He requested that consent be refused.

Mr Allan Parker presented written evidence on behalf of the Shakespear Open Sanctuary Society. As well as being a member of the Society he lives approximately 700 metres from the site and overlooks it. He stated that four of the Society's committee members lived within a kilometre of the site and all relied on tank water collection. The Society supported the proposal and were working closely with the Council to finance and implement the proposed sanctuary. He outlined the significant community support for the proposal. He stated that he had been involved with pest control in this locality for approximately ten years and that native birds were returning to the area whereas opossums had been the dominant species in 1974 when he moved to Army Bay. He was very clear when asked if he thought land based trapping could achieve a predator free environment. He had no doubt that only an aerial drop could deliver a predator free sanctuary. He stated that land based methods would be too difficult given the topography and the number of places predators had to hid. He requested that consent be granted subject to conditions.

Mr Bob Tait and Mr Paul Tucker presented written evidence on behalf of Friends of the Earth (NZ). Specific reference was made to 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, New Zealand Food Safety Authority, June 2006". A copy of this document was provided as was a copy of the "Current agreed best practice for rat eradication - aerial broadcasting poison bait, Department of Conservation, August 2010." A significant issue of concern for both Mr Tait and

Mr Tucker was that the proposal, in their opinion, would not be undertaken in accordance with, in particular, the Code of Practice requirements.

Of more general concern to these submitters were the risks to the public and the sub-lethal effects of the proposed bait drop. These aspects were discussed in some detail in the written evidence and the power point material that was presented.

Mr Tait made it clear in response to questions from the Commissioners that based on his previous experience in opposing similar proposals, that an appropriately worded set of conditions should be able to be drafted that would satisfactorily respond to the issues he had raised. While neither he nor Mr Tucker had prepared a revised set of conditions, he did list a number of additional matters that he considered should be covered by way of conditions.

## **Reply**

The applicant's right of reply was given by legal counsel, Patrick Mulligan, and addressed the following matters:

1. Clarification of the land holdings on the subject site.
2. District Plan requirements.
3. The permitted baseline.
4. Reconciliation between regional planning objectives - ALW Plan and ARC: Coastal Plan.
5. Conditions.
6. Risk to human health.
7. Risk to non-target species.
8. Risk to the marine environment.
9. The viability of ground based methods of pest eradication.
10. US EPA recommendations.

In response to the evidence presented by submitters, Mr Mulligan stated that the detailed evidence of the applicant's witnesses had addressed all of the matters raised. With respect to the alleged health effects he noted that no evidence had been presented from suitably qualified people by any of the submitters. He reiterated the fact that a large part of the proposed activities are permitted under the planning documents. He also stressed the positive outcomes that would result from the proposal and the significant community support for the proposal. He acknowledged that a further revision of the recommended conditions would be desirable and he supported an adjournment to enable this to occur, including the opportunity for submitters to participate.

## PRINCIPAL ISSUES THAT WERE IN CONTENTION

After analysis of the application and evidence (including any proposed mitigation measures), reviewing the Council Section 42A report and expert reviews, reviewing the submissions and concluding the hearing process, it is considered that the proposed activity raises a number of key issues for consideration and these are set out below as the principal issues in contention are:

1. Whether the permitted baseline is of relevance with respect to the proposed activity.
2. Whether the proposal will result in a risk to human health.
3. Whether the proposal will result in a risk to non-target species.
4. Whether the proposal will result in a risk to the marine environment.
5. Whether ground based methods of pest eradication could be a viable alternative to the proposed aerial application.
6. Whether overall the adverse effects on the environment are minor.
7. Whether the activity will be contrary to the objectives and policies of the relevant planning documents.
8. Whether appropriate conditions can be imposed to avoid, remedy or mitigate adverse effects of the proposed activities on the environment.
9. Whether the proposal will promote the sustainable management of resources as contemplated by Part 2 of the Act.

## THE MAIN FINDINGS ON PRINCIPAL ISSUES IN CONTENTION

The main findings of fact determined by the Commissioners that have led to the above decision and the reasons for that decision are as follows. They have been reached after considering the application, the evidence and submissions heard at the hearing, the report prepared by the reporting officer, all the relevant statutory and planning provisions, as well as the principal issues that were in contention.

### The Permitted Baseline

The Regional Plan: Air, Land and Water permits the application of brodifacoum on the subject site, by a number of different methods, provided that certain requirements of the New Zealand Standard NZS 8409:2004 Management of Agrichemicals are met. Chapter 4A, Agrichemicals - Application and Use contain the relevant plan provisions.

The unchallenged evidence of Ms Bell and the oral advice from Mr Noble, the reporting officer, after hearing all the evidence presented, has been accepted by the Commissioners. The key aspect of the permitted baseline was summarised by Mr Mulligan in paragraph 2.8 of his reply when he stated:

*"The permitted application methods of brodifacoum include handheld, motorised and aerial applications. The type and complexity of potential effects (e.g. risks to non-target species and human health) arising from such discharges to land and water have all been deemed acceptable for the purposes of the regional planning framework."*

At paragraphs 2.10 and 2.11 Mr Mulligan went on to state:

*"2.10 As noted previously, the key reason why consent is needed for this proposal is the method of discharge and its proximity to the coast line. Because of the particular type of aerial discharge to be used there may be some accidental spread of bait to adjoining property and/or the CMA, i.e. outside the site boundaries. As a result, and out of an abundance of caution, the proposed discharge requires consent."*

*"2.11 Notably any discharge method which could safely avoid this risk to adjoining sites, including an aerial discharge, perhaps with a larger buffer zone to prevent spray drift, would be permitted in terms of the ALW Plan and the applicant could carry this out as of right. The potential adverse effects on human health, non target species and rodents arising from such a discharge are all contemplated and permitted by the ALW Plan. The Commissioners are in fact entitled to disregard these "permitted" effects on the environment in terms of s104."*

Section 104 (2) of the Act states that when forming an opinion on the actual and potential effects on the environment of allowing an activity, the Commissioners may disregard an adverse effect if the plan permits an activity with that effect. The Commissioners agree with Ms Bell when in her paragraph 7.3 she stated that, *"Ignoring the permitted baseline in this instance would, in my opinion, not enable a fair or well reasoned assessment of the actual effects of the proposed activity on the environment."*

The Commissioners find that the permitted baseline is relevant in the context of this application and that it is appropriate to disregard the adverse effects that are permitted by the rules contained in Chapter 4A of the ALW Plan.

## **The Risk To Human Health**

A significant aspect of the concerns raised by many submitters related to the risk to human health. While acknowledging the strongly held views of submitters, the Commissioners have placed considerable weight upon the evidence presented in support of the proposal. The evidence was from appropriately qualified and well experienced witnesses who presented a well reasoned case based on the specific activities proposed, that subject to conditions any risk to human health can be avoided or minimised.

In contrast the evidence presented by submitters was more general in nature, citing potential risks based largely on reports on other activities that had taken place both in New Zealand and overseas. The evidence from submitters largely ignored the fact that the ALW Plan permitted the use of brodifacoum for the purpose of pest control. For those submitters who were opposed in principle to the use of brodifacoum, the Commissioners have considered their concerns in relation to health risks in the context of the permitted baseline under the ALW Plan.

Subject to the conditions of consent that have been imposed the Commissioners have accepted the specialist and the only suitably qualified evidence presented on behalf of the applicant, that any risk to human health is relatively low and has been appropriately avoided or mitigated. Of particular relevance in this regard are:

1. The public will not have access to the park during operations.
2. The informed consent of the landowners and permanent residents within the site has been obtained.
3. Extensive public notification will occur prior to and during the operations, including signage to warn the public not to collect shell fish.
4. The waste water treatment plant area will be excluded from the aerial application.
5. An Operational and Hazardous Substances Management Plan will be prepared prior to operations commencing.
6. Specific measures will be in place with respect to the YMCA Shakespear Lodge, the New Zealand Defence Force and the waste water treatment plant.

## **The Risk to Non-Target Species**

It was acknowledged by the applicant that there would be a risk of non-target species being poisoned by the proposed operations. In very general terms the evidence suggested that there would be short term impacts, but that the loss of any non-target species would be acceptable in terms of the long term benefits that would result from a predator free sanctuary being established. More specifically the evidence in support of the proposal set out the measures that would be put in place to minimise these risks. These measures included:

1. Domestic pets, stock, peafowl and brown teal within the site would be relocated during operations and for a period after the bait drop.
2. To prevent secondary poisoning of the New Zealand Dotterel a search of the high tide area would be undertaken immediately following the drop and baits would be removed to prevent ingestion by sandhoppers.

3. Populations of other species possibly facing risk of poisoning such as pukeko, paradise duck and more pork will be surveyed before and after the drop to assess the effects and to monitor recover.

Based on previous similar operations, such as at Tawharanui, the proposal would result in significant biodiversity and social benefits in the medium to long term that outweigh any short term loss of non-target species.

The concern raised by a number of submitters was that any loss of non-target species would be unacceptable.

The Commissioners acknowledge that non-target species could be adversely affected by the proposed activities. It is relevant to put such adverse effects into the context of pest control activities that can occur as a permitted activity and the pest control measures that have been taking place for a number of years in this locality. While the intensity of the proposed bait drop has the potential to poison a number of non-target species, the risk can be appropriately managed by the conditions of consent that have been imposed.

The Commissioners accept the argument that any loss of non-target species will be outweighed by the long term positive outcome that will arise from the establishment of a predator free sanctuary.

### **The Risk to the Marine Environment**

Based on the evidence presented in support of the proposal and the lack of any equivalent specialist expert evidence to the contrary, the Commissioners have accepted, in particular, the evidence of Dr Grace with respect to the possible effects on the marine environment.

Dr Grace concluded at his paragraph 5.2 that:

*"In terms of the potential for damage to the marine environment by the proposed very carefully planned drop of brodifacoum to get rid of the rodents from Shakespear, any harm done would be short term and negligible compared to the long term and extensive damage that has been done over the last 40 years of perfectly legal fishing and early high sediment load sewage discharge."*

At his paragraph 8.1 he went on to state that:

*"Based on my long term observations of the lack of impact of the brodifacoum drop on marine life at Tawharanui, and the physical similarity of this site with that present at Shakespear, I believe that there will be no long term impact in the coastal marine area from the proposed brodifacoum programme at Shakespear Open Sanctuary, and that if any short term impact is detected it will be no more than minor."*

Subject to the conditions that have been imposed to minimise any accidental discharge of bait into the coastal marine area the Commissioners that any risk to the marine environment has been appropriately managed and will be no more than minor.

## **Whether ground based methods of pest eradication could be a viable alternative to the proposed aerial application**

A number of submitters supported a ground based approach would be a viable alternative approach to the proposed aerial approach.

The evidence from Mr Maitland, who has 15 years experience in mainland and off shore island ecological restoration, animal pest eradication and control, threatened species management and wildlife translocations, at his paragraph 2.14 was that:

*"Eradication by ground based method has also been considered and rejected as it is logistically more challenging and costly, and has a lower track record of success than aerially applied bait, primarily because it is logistically difficult to achieve the principle or eradication theory that all animals be put at risk by the eradication tool(s) due to terrain and labour costs."*

He went on to state at his paragraphs 2.15 and 2.16 that:

*"2.15 This method, ground based eradication, does not comply with current agreed best practice. The intensity of a pest eradication grid network to achieve eradication of all target species including mice would have a substantial negative effect upon the environment resulting from the cutting of tracks, etc."*

*"2.16 Although most of Shakespear Open Sanctuary is accessible (if management access tracks were cut) some areas such as coastal cliffs are not, and as a result pose significant risk of operational failure as a principle of eradication is that all pest animals must be put at risk from eradication tool(s) and any survivors threaten the outcome. A restricted access area on NZDF land also poses a significant risk of operational failure due to the inability of NZDF to ensure access for such a continuous operation. Ground based methods would also impose significant additional disruption to the core business of NZDF and Watercare as landowner partners."*

In addition to Mr Maitland's evidence, Mr Parker from the Shakespear Open Sanctuary Society informed the Commissioners of his practical experience on the site over the past ten years with ground based pest control. He was very clear that, although some progress had been made to date, that an aerial drop was the only option to provide a predator free sanctuary.

The technical and practical expertise of these two witnesses have been accepted and relied upon by the Commissioners in finding that a ground based approach would not be a viable alternative method to the proposed aerial approach.

## **Whether overall the adverse effects on the environment are minor**

In terms of sections 104 and 104D of the Act the only planning evidence presented was from Ms Bell on behalf of the applicant. Her conclusion was that based on the expert evidence of Mr Maitland, Dr Craddock, Mr Lovegrove and Dr Grace that any adverse effects on the environment would be no more than minor.

Mr Noble, the reporting officer, after careful analysis also reached the same conclusion.

This evidence with respect to sections 104 and 104D of the Act was uncontested by any other party.

For the reasons discussed above with respect to the risk to human health, non-target species and the marine environment, the expert evidence on behalf of the applicant has been preferred to the evidence presented at the hearing from submitters who opposed the application.

In the context of the effects that are permitted by the ALW Plan with respect to the use of brodifacoum on this site and subject to the conditions that have been imposed, the Commissioners have found that overall any adverse effects on the environment will be no more than minor.

**Whether the activity will be contrary to the objectives and policies of the relevant planning documents**

In terms of sections 104 and 104D of the Act the only planning evidence presented was from Ms Bell on behalf of the applicant. She agreed with Mr Noble, the reporting officer, that the proposal was consistent with, rather than contrary to, the relevant provisions of ALW Plan and the Coastal Plan.

With respect to the former Rodney District Council District Plan, no consents are required. The Shakespear Regional Park is designated and the subject site is zoned Open Space 2 under the district plan.

This evidence with respect to sections 104 and 104D of the Act was uncontested by any other party. No objectives or policies were identified that this proposal could be considered to be contrary to by any witness.

In terms of section 104D of the Act the Commissioners have found that the proposal would not be contrary any objective or policy of the relevant planning documents.

**Whether appropriate conditions can be imposed to avoid, remedy or mitigate adverse effects of the proposed activities on the environment.**

The proposal is one where a number of conditions can be used to avoid, remedy or mitigate adverse effects of the proposed activities on the environment. In particular conditions can address matters around the methodology for the poison drops, the retrieval of surplus bait from land and within or adjacent to the CMA, the monitoring of effectiveness, health and safety matters including operational warning advice to the public and other persons entering SOS, methodologies for minimising risk in regards to poison entering the CMA, emergency strategies and operational plans and compliance with all relevant statutory requirements in respect of the use of such poisons.

**Whether the proposal will promote the sustainable management of resources as contemplated by Part 2 of the Act.**

The positive outcomes intended by this proposal that will create a predator free sanctuary known as the Shakespear Open Sanctuary were supported by most if not all submitters. The key point of difference between the applicant and the submitters in opposition related to the method being used to achieve the predator free outcome.

The significant ecological benefits that will arise from the creation of an open and accessible sanctuary that will integrate recreation, conservation and farming at the Shakespear Open Sanctuary will promote the sustainable management of natural and physical resources as contemplated by Part 2 of the Act.

The aerial discharge of brodifacoum as proposed will enable this sanctuary outcome to be achieved, and is more likely to be successful than any land based pest eradication proposal. This aerial method of pest eradication has been successful, most recently at Tawharanui Regional Park, and subject to the more effective conditions of consent that have been imposed on this consent, the proposal will sustainably manage the land at Shakespear for future generations while avoiding, remedying or mitigating any adverse effects on the environment.

In reaching an overall broad judgement in terms of Part 2 of the Act, this proposal merits the grant of consent.

## DECISION

Having regard to the foregoing matters discussed in the deliberations by the Commissioners in exercising its jurisdiction pursuant to section 34A and having considered sections 104, 104B, 104D, 105, 107, 107A-D and 107E, 108, and Part 2 of the Resource Management Act 1991, the Auckland Council has made the following decision:

That consent for applications 38472 and 28473 be **granted** subject to the following conditions (and advice notes) stated in this decision report, for the reasons set out below.

## REASONS FOR THE DECISION

1. The proposal is consistent with Part 2 of the Resource Management Act 1991 by promoting the sustainable management of natural and physical resources. Overall it is considered that the cumulative safeguards of section 5(2) (a) to (c) have been met and the proposal thereby meets the purpose of the RMA.
2. The proposal contributes to the social, economic and cultural well being of people and their communities because it is another step in making Shakespear Open Sanctuary a pest-free mainland island sanctuary which will facilitate its restoration by stakeholders along with natural regeneration of endemic plants to allow the relocation of endangered endemic species, (i.e. saddleback), which will enhance visitor experiences and promote eco-tourism.
3. The proposed bait application methodology represents the best practicable option for achieving eradication of rodent species from SOS. It is noted that this methodology has been used to successfully eradicate rodents from more than 30 off-shore islands and mainland islands throughout New Zealand. In addition, a one-off aerial application inputs fewer toxins into the environment over time than ground-based control operations which may potentially present cumulative on-going secondary poisoning effects.
4. The proposal is consistent with the relevant provisions of the Auckland Regional Policy Statement, in particular the integrated management of the Region's natural and physical resources.
5. The proposal is consistent with the relevant objectives and policies of the Proposed Auckland Regional Plan: Air, Land and Water because it meets the requirements of the relevant objectives and policies and the assessment criteria for the discharge of agrichemicals to air, land and water. Further any potential adverse effects on fauna will be remedied by natural processes in the short term.

6. The proposal is consistent with the relevant objectives and policies of the Auckland Regional Plan: Coastal because it meets the requirements of the relevant objectives and policies and because any accidental discharge into the CMA will be transitory and will be remedied by natural processes in the short term.
7. The proposal is consistent with the designation and zoning of the land under the relevant district planning documents.
8. Subject to the conditions of consent that have been imposed the proposal will appropriately avoid, remedy or mitigate any adverse effects on the receiving environment.
9. The sensitivity of the receiving environment to the adverse effects of the discharge will not be compromised given the level of the discharge, the use of suitable technology and appropriate management techniques.
10. That the proposal satisfies both gateway tests of section 104D of the Act.
11. The proposal will be undertaken in compliance with 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, New Zealand Food Safety Authority, June 2006.
12. The grant of consent is consistent with the relevant objectives and policies of the New Zealand Coastal Policy Statement 2010.
13. The grant of consent is consistent with the Hauraki Gulf Marine Park Act 2000.
14. The proposal is consistent with the Auckland Regional Pest Management Strategy 2007-2013 as all of the target species are designated pests.

## **CONDITIONS**

### **GENERAL CONDITIONS:**

1. That the servants or agents of the Council be permitted access to the relevant parts of the property and site at all reasonable times for the purpose of carrying out inspections, surveys, investigations, tests, measurements or taking samples. In the case of the NZDF land this shall require the permission of the landowner.
2. That the Consent Holder shall conduct the eradication operation in accordance with a) the documentation submitted to the Council as part of application numbers 38472 and 38473, and b) all appropriate legislation. No alterations shall be made to processes that do not, or are not likely to, comply with the provisions of this consent, a regional rule or regulations under the Resource Management Act 1991.

## OPERATIONAL CONDITIONS

3. The Consent Holder shall ensure the discharge shall comprise of Pestoff® Rodent Bait 20R being cereal baits containing 20 mg/kg of brodifacoum to air, land, water and coastal marine area of Shakespear Open Sanctuary (hereafter referred to as **SOS**), in order to eradicate the rodents identified in the application documents. The total quantity of the aerial application of cereal baits is not to exceed 16.5 tonnes.
4. The aerial application of the bait must be undertaken by operators with appropriate agrichemical application qualifications and experience.
5. The Consent Holder shall ensure the baits shall consist of Pestoff Rodent Bait 20R, (20mg/kg brodifacoum) brodifacoum @0.002 wet weight un-waxed cylindrical pellets made from ground cereal dyed green with an approximate diameter of 10mm. Pellet length may vary by approximately 10-20mm and weigh approximately 1.5 grams with the average pellet weight being no more 2 grams.
6. The Consent Holder shall ensure the bait is randomly sampled, taking a representative sample of 5% of the bait and that those samples are analysed to verify the toxin content is approximately 20mg/kg brodifacoum. Confirmation of the sampling results shall be supplied to the Manager prior to operations commencing.
7. The Consent Holder shall be limited to a one-off eradication operation comprised of three aerial bait discharges (stage 1, 2 and 3) each occurring a minimum of two weeks apart during a forecasted fine weather period of at least 3 days between 1 June to 31 October during the consented term at bait densities not exceeding 30kg/ha in total and in general accordance with the amounts set out below for the following stages:
  - 14kg/ha 8kg/ha (Stage 1)
  - 8kg/ha (Stage 2)
  - 8kg/ha 14kg/ha (Stage 3)
8. The Consent Holder shall ensure the eradication operation shall be undertaken in compliance with 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 as approved by the New Zealand Food Safety Authority.
9. The Consent Holder shall ensure that all livestock, working dogs and any other domestic animals shall be removed from **SOS** prior to the first aerial bait application and shall not be returned until it is shown through bait breakdown trials (refer Condition 17 ) that all bait has broken down in accordance with the Craddock 2004 scale (See Appendix 1). Regardless of the outcome of such bait breakdown trials, livestock shall not be returned to **SOS** earlier than 120 days following the last aerial bait application.

10. The Consent Holder shall ensure that a local vet or staff member or contractor authorised in the administration of Vitamin K antidote is available to administer Vitamin K antidote to brodifacoum to treat any poisoned endemic birds (or any other poisoned wildlife). Any decision to administer Vitamin K antidote shall be made in consultation with the Department of Conservation.
11. From commencement of the operation until reopening of the **SOS**, the Consent Holder shall ensure that the Accident and Emergency Centre at Red Beach or a local doctor is on call and able to administer the Vitamin K antidote to brodifacoum and treat any person poisoned as a result of the bait drop.

#### **NOTIFICATION of BAIT DROP**

12. The Consent Holder shall give notice, being not less than 20 working days prior to the implementation of this consent (being the first day on which the first aerial bait application is planned to be undertaken), to Iwi, the Auckland Regional Public Health Service, Harbour Master, Auckland Council, and the public at large, that Shakespear Regional Park will be closed. Notice shall be given by way of adverts in the New Zealand Herald, local newspapers, and written notice in the Auckland Council, Orewa and Warkworth Offices and on the Council website and any other media deemed appropriate by the Consent Holder.
13. The Consent Holder shall ensure warning signs identifying the proposed use of brodifacoum shall be erected at prominent places at all public landing areas (coastal access points) around SOS and all potential entry points to the NZDF and Shakespear Regional Park for at least 20 working days prior to the first aerial bait application in accordance with the Operational Management Plan required by Condition 16.
14. The Consent Holder shall close Shakespear Regional Park to public entry during any aerial bait application days and for a minimum of 120 days after bait application has been completed, or when bait breakdown is established by monitoring trials (refer Condition 17) to have reached level 6 on the Craddock scale (refer Appendix 1).

#### **HAZARDOUS SUBSTANCES and OPERATIONAL MANAGEMENT PLAN CONDITIONS**

15. The Consent Holder shall prepare a **Hazardous Substances Management Plan**, which will include an **Emergency Spill Contingency Plan**, relating to the discharge of cereal baits containing 20mg/kg of brodifacoum to the air, land, water and coastal marine edge of SOS and submit those Plans to the Manager for written approval 20 working days prior to the date of implementation of this consent. Any amendments to the Hazardous Substances Management Plan or the Emergency Spill Contingency Plan shall be forwarded to the Manager for written approval prior to their implementation.

The Hazardous Substances Management Plan and Emergency Spill Contingency Plan shall shall provide for, but not be limited to addressing the following matters:

- i. Establishing contingency procedures for the handling, storage, disposal, and unintended discharges of the bait to the coastal marine area, waterways as well as specifying the provision of emergency equipment and procedures for notification of events to the appropriate authorities
- ii. Ensuring bait packaging, storage, labelling, transport, use and disposal shall be undertaken in accordance with label, industry and Hazardous Substances and New Organisms Act 1996 standards, and in accordance with the most recent edition 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 and Parks Standard Operating Procedure.
- iii. Ensuring that the **Emergency Spill Contingency Plan** provides for the availability of spill kits for fuel and bait spills. The contractors involved in the fuel supply and helicopter refuelling and bait supply and application operations must be obligated contractually to implement standard health, safety and risk management procedures that are in accordance with the requirements of the Hazardous Substances and New Organisms Act 1996.
- iv. Ensuring both the Hazardous Substances Management Plan and the Emergency Spill Contingency Plan require implementation of the relevant provisions of the most recent version of the **Parks Standard Operating Procedure for the Use of Pesticides**.
- v. Ensuring that copies of the approved **Emergency Spill Contingency Plan**, all emergency equipment, and an approved **Health And Safety Plan** are kept on site at all times and are readily available. All personnel associated with the bait applications shall be made aware of the content and implementation of these plans and the location of emergency equipment.
- vi. Ensuring that in the event of any accidental spill, [due to human error or mechanical failure], of more than 50kg of bait onto land or into the coastal marine area, the Consent Holder notifies the Manager and the Auckland Regional Public Health Service of any such event and that as soon as practicable the Emergency Spill Contingency Plan is implemented to avoid, remedy or mitigate any potential or actual adverse effects of the spill.

15.1 Once approved, the consent holder shall comply with and implement the provisions of the Hazardous Substances Management Plan and Emergency Spill Contingency Plan.

#### **OPERATIONAL MANAGEMENT PLAN**

- 16. The Consent Holder shall prepare an appropriately peer reviewed **Operational Management Plan** relating to the discharge of cereal baits containing 20 mg/kg of brodifacoum to the air, land, water and coastal marine edge of SOS and submit that Plan to the Manager for written

approval no less than 20 working days prior to the date of implementing this consent. Such a Plan will include a peer review by a suitably qualified independent reviewer as part of the Plan being submitted to Council for approval. Any variations or amendments to the approved Operational Management Plan shall be provided to the Manager for written approval prior to implementation of any matters addressed in such variation or amendment.

The **Operational Management Plan** shall provide for but not be limited to addressing the following matters:

- i. The posting of public notices at all practical access points to SOS notifying the public of the operation and intended bait drop dates at least 20 working days in advance of commencement;
- ii. Arrangements for notification to mariners by way of repeated message broadcast over the marine radio public bands prior to, during and following the operation;
- iii. Arrangements to place warning signs in and around known cockle collection beds advising of the use of the poison and clearly stating that harvesting should be avoided until an "all-clear" notification is given in a similar way;
- iv. Arrangements for the location, content and monitoring of public warning signs;
- v. Arrangements for the stationing of Council staff (or Council's agents) at the park entry points, the Army Bay Boat ramp and in vessels along the coastline on the days of bait application to advise the public of the operation and the areas they should avoid,
- vi. The nature and method of arrangements for addressing Health and Safety procedures for residents, staff, contractors and guests (or any other persons located on the application site at the time of operations) of Auckland Council, Watercare, YMCA and NZDF located within SOS during the operation, including advice on measures to ensure the disconnection of down-pipes providing roof-water supply during the eradication operation including the cleansing of roofs and gutters that provide roof water supply;
- vii. Details of the operational and notification procedures for Watercare, including:
  - The applicant shall notify the operator of the Army Bay Wastewater Treatment Plant at least 7 days before it intends to apply any baits in the area. During the bait drop, the treatment plant operator shall be informed of the times of the fly over to ensure all personnel on site are indoors.
  - On dates of aerial application, temporary covers will be erected by the applicant (or at their cost) over all open topped process areas of the Army

- Bay Treatment Plant, including the influent chamber, splitter chamber, DAF tanks and UV channels to prevent any bait entering the treatment process.
- Bait will not be aerially applied over the Army Bay wastewater plant ponds and sequencing batch reactors. There will be a 50m flight exclusion from the edges of the ponds.
  - Following the conclusion of the operation any unconsumed excess baits will be removed from roofs, concrete areas and access ways used by the treatment plant personnel.
- viii. Methods for bait loading and handling practices to ensure baits remain intact and do not unnecessarily generate wind borne dust contamination;
  - ix. Operational methods for the use of a trickle bucket for bait application in proximity to the CMA including details of methods for prevention of overflying that area during bait drops using the directional distribution bait application method;
  - x. The use of directional distribution bait application method inside the landward edge of the trickle baited area;
  - xi. Details of operational plans for limiting the timing of the trickle bucket aerial application of bait (refer clauses ix and x above) within a coastal edge buffer zone (being that area seaward of the top of any coastal cliffs or 50m landwards from MHWS whichever the greater distance is) to either side of low tide in order to limit the amount of bait dropping into coastal waters and to maximise the potential for the retrieval of any bait falling in proximity to the CMA.
  - xii. Details of operational plans for the search and recovery of any bait located at the CMA interface including intertidal rock platforms and all beaches **immediately** after any aerial bait application.
  - xiii. Details of operational plans for the measures required by the Dowding 2009 recommendation, being the clearing of drift seaweed from known NZ dotterel territories prior to the commencement of any bait application in such areas, and the removal of baits **immediately** after any aerial bait application;
  - xiv. Details of methods for and implementation of a monitoring programme for Pateke (Brown Teal) and peafowl which shall occur before the application of any bait. That programme shall set out the means to be used for managing any Pateke and peafowl found in accordance with specialist advice from either DOC or the Pateke Recovery Group and may require relocation of the birds for the duration of the bait operation;
  - xv. Measures to provide for independent observation (by prior arrangement with the consent holder) of aerial baiting operations;
  - xvi. Measures to implement a bait exclusion buffer zone (to be excluded from aerial bait application) within and around the Watercare wastewater treatment plant facility including the wastewater Treatment Plant ponds and the associated sequencing batch reactors. There shall be a 50m flight exclusion zone measured from the edges of the ponds;

- xvii. Details of operational plans, on the dates of proposed aerial applications, for ensuring that temporary covers are erected by the consent holder (or by other parties at the consent holders cost) over all open topped process areas of the Army Bay Treatment Plant, including the influent chamber, splitter chamber, DAF tanks and UV channels to prevent any bait accidentally entering the treatment process.
  - xviii. Measures following the conclusion of the operation, to ensure that any unconsumed excess baits are removed from all roofs, concrete areas and all access ways used by the treatment plant personnel.
  - xix. Details of operational plans for the placement of observers along the SOS fence line to report and remedy any bait dropped outside the operational area;
  - xx. Details of operational plans for collection of carcasses from accessible and high profile areas within the operational areas;
  - xxi. Methods for the testing of cockle beds after the final bait application such that the posting of an "all-clear" notification to the public in respect of gathering of shellfish can be safely made;
  - xxii. Details of operational plans for undertaking the monitoring during and after the bait application to gather the information necessary to prepare the bait Breakdown Trials required by Condition 16 and Monitoring Report required by Condition 17;
17. The Consent Holder shall undertake **Bait Breakdown Trials** commencing immediately after the completion of the last aerial bait application, to establish to the Managers satisfaction that all bait has broken down in accordance with the Craddock 2004 scale (See Appendix 1). Regardless of the outcome of these bait breakdown trials in accordance with the Craddock 2004 scale, livestock shall not be returned to **SOS** earlier than 120 days following the last aerial bait application.
18. The Consent Holder shall prepare a **Monitoring Report** detailing the results of the Operational Management Plan, which shall be provided to the Manager, six months following the final bait application, and shall include
- i. The results of testing of bait against technical specifications;
  - ii. Observation of (and evidence of) actual bait density on the ground and at the coastal edge and CMA boundary following application;
  - iii. Evidence establishing the density of brodifacoum on the ground in representative areas of land within a cross section of the vegetation types present within the operational area;
  - iv. Evidence establishing the density of bait distribution using GPS data gathered from helicopter flights within the operational area;

- v. Observation of (and evidence on) the mortality of non-target threatened endemic species including freshwater fish, birds and reptiles within the operational area;
- vi. Evidence establishing the efficacy of the programme against target species;
- vii. Evidence establishing the presence of brodifacoum residue in a representative sample of stock reintroduced to SOS prior to the first occasion that stock is slaughtered for human consumption, using appropriate methods and tested by an appropriate agency
- viii. Evidence establishing the results of tests carried out to establish the presence and concentration of brodifacoum in representative samples of marine molluscs and sediment (i.e. both in a temporal and locational sense) from Hauaroa Point, Pink Beach and Okoromai Bay;
- ix. Evidence establishing the results of tests carried out to establish the presence and concentration of brodifacoum in penguins and any marine mammal found dead on the Whangaparaoa peninsula beaches within three months after the final bait drop;

18.1 At six monthly intervals for two years after the provision of the Monitoring Report updates are to be provided to the Manager detailing evidence related to any mortality of non-target threatened endemic species and evidence documenting the recovery of endemic species.

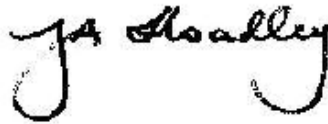
## **REVIEW CONDITION**

- 19. That the conditions of this consent may be reviewed by the Manager pursuant to Section 128 of the Resource Management Act 1991, by the giving of notice pursuant to Section 129 of the Act, commencing in 2011 and every year thereafter in order:
  - 1. To deal with any adverse effect on the environment which may arise or potentially arise from the exercise of this consent and which it is appropriate to deal with at a later stage.
  - 2. In the case of a discharge permit or a coastal permit to do something which would otherwise contravene section 15 or 15B of the RMA, to require the adoption of the best practicable option to remove or reduce any adverse effects on the environment.
  - 3. In the case of a coastal, water or discharge permit, to provide compliance with rules in any regional plan relating to use of water, water or air quality etc (see section 128(1)(b) RMA) that have been made operative since the commencement of consent. In the case of a coastal, water or discharge permit, to provide compliance with any relevant NES that has been made since the commencement of consent.

**ADVICE NOTES**

1. Please read the conditions of this resource consent carefully and make sure that you understand all the conditions that have been imposed before commencing the activity.
2. A copy of this consent should be held on site at all times during the establishment and construction phase of the activity. The consent holder is requested to notify Council, in writing, of their intention to begin works, a minimum of seven days prior to commencement. Such notification should be sent to the Manager and include the following details:
  - Name and telephone number of the project manager and site owner;
  - Site address to which the consent relates;
  - Activity to which the consent relates; and
  - Expected duration of the activity
3. If you disagree with any of the above conditions, or disagree with the additional charges relating to the processing of the application you have a right of objection pursuant to sections 257A or 357B of the RMA. Any objection must be made in writing to Council within 15 working days of notification of the decision.
4. Compliance with the consent conditions will be monitored by Council in accordance with section 35(d) of the Resource Management Act. This will typically include site visits to verify compliance (or non compliance) and documentation (site notes and photographs) of the activity established under the Resource Consent. In order to recover actual and reasonable costs, inspections, in excess of those covered by the base fee paid, shall be charged at the relevant hourly rate applicable at the time. Only after all conditions of the Resource Consent have been met, will Council issue a letter on request of the consent holder.

Chairperson



Date:

26 January 2011

## APPENDIX 1

### Craddock's Pellet Breakdown Scale

**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:** Mush 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.

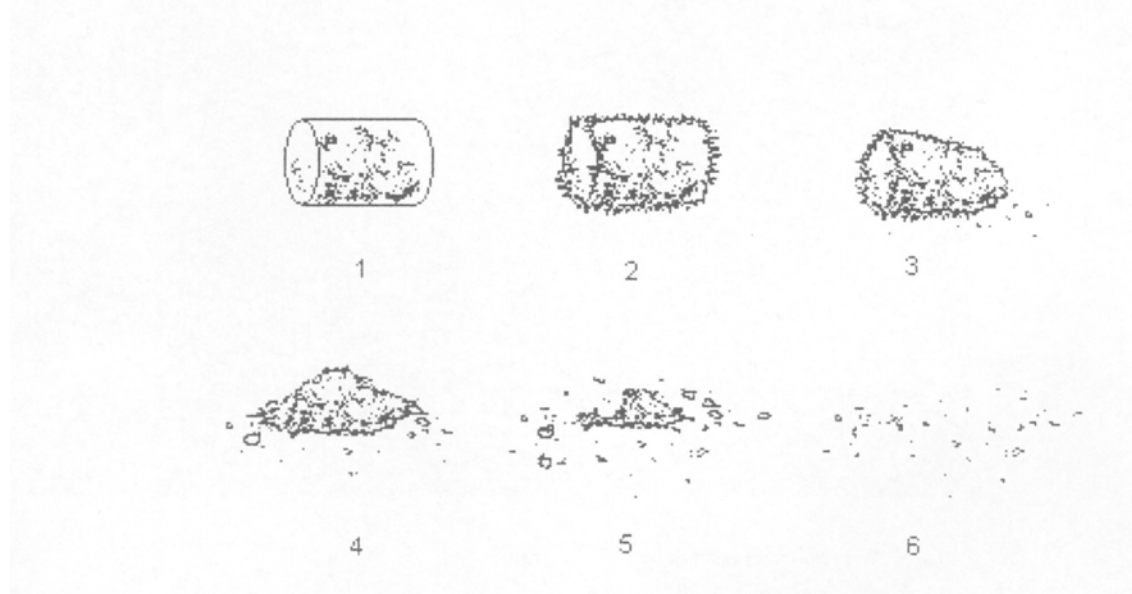


Illustration of typical bait condition at each ordinal score used in the bait breakdown trial undertaken by Craddock, 2004.