

Project Hunua 2015 Post Operation Report

File No.: CP2016/01752

Purpose

1. To provide an overview of the 2015 Hunua Ranges aerial 1080 operational programme, including post-treatment results achieved.

Executive Summary

2. In October 2014 the Regional Strategy and Policy Committee approved a change in pest control methodology for the Hunua Ranges regional parklands, to include the aerial application of sodium-fluoroacetate (1080) commencing in mid-2015.
3. The decision to change pest control methodology was based on the risk that increasing animal pest densities posed to significant species and ecosystems in the parklands. Aerial application of 1080 cereal pellets was recommended as the most effective method to reduce pest densities to targeted levels across the expansive parkland and to protect the significant ecological values within it.
4. The 1080 bait application was carried out across two treatment blocks in August and September 2015 to reduce pest densities to below the agreed performance measure of five per cent tracking or trapping index. Post-operational monitoring results showed a successful reduction in rat densities across the operational area from 91.6 per cent to 1.03 per cent. Significantly, no rats were detected in the monitoring carried out in the high value Kōkako Management Area following the operation or in three subsequent monitors carried out at six-weekly intervals.
5. The specific management focus for the Hunua Ranges regional parklands as set out in the Regional Parks Management Plan 2010 is to 'protect and enhance this outstanding wildlife habitat with high ecological values, and to cultivate an ethic of stewardship'. The 1080 bait application has directly delivered to the following objectives:
 - lowering the threshold for possum control to a maximum of five per cent residual trap catch to reduce possum abundance over the whole park to improve forest health
 - continuing integrated pest animal control at selected sites within the ranges, including the Kōkako Management and Hunua Falls Pest Control Project Areas...to allow for complete ecosystem recovery and reintroductions of rare and threatened species
 - continuing the integrated pest animal eradication and management programmes in the Hunua Ranges onto neighbouring reserve land and adjoining private property.
6. Outcome monitoring of the species being protected as a result of the operation is continuing but early results are positive including the successful fledging of 13 kōkako chicks from six monitored pairs, compared with no chicks in the 2014/15 breeding season and the on-going presence of Hochstetter's frogs following the operation.
7. Ongoing pest management is essential if the high-value environment of the Hunua Ranges is to be maintained. Pest management options will continue to be assessed and informed by ongoing monitoring. Council is committed to ensuring its pest control toolbox is based on best practice and is supporting the development of new technologies such as remote sensing and self-resetting traps. However, to maintain the gains from the 2015 pest control programme, further range-wide pest control using 1080 is likely to be required.

8. This pest control operation allowed for significant discussion with environmental groups, users of the parklands, adjoining residents, and partnership level discussions with mana whenua and the Franklin Local Board on how to protect, restore and enhance the ecological values of the Hunua Ranges. These relationships have tangible outcomes wider than the use of 1080 in the park and they will be fundamental to the successful future management of the parklands. For example as a result of the operation a number of neighbours indicated a strong willingness to manage pest on their properties and council will work with them to build on this enthusiasm to create stronger pest animal buffer zones for the park. Significantly, our partnership with mana whenua is creating a greater understanding of kaitiakitanga and the kaitiaki cadetship programme with the Department of Conservation and Auckland Council is one way this will continue to be fostered.
9. These relationships will be especially important as the reduction in pest densities also raises the possibility of reintroducing indigenous species that would have historically been present within the parkland (such as North Island brown kiwi) or which would benefit from the Hunua Ranges habitat.

Recommendations

That the Regional Strategy and Policy Committee:

- a) note the achievement of the 2015 Hunua Ranges regional parklands aerial 1080 operation in reducing pest densities.

Comments

Background

10. The Hunua Ranges is the largest forest in mainland Auckland, characterised by rugged terrain, low population densities, outstanding wildlife habitat and high ecological values.
11. It is home to the only naturally occurring population of kōkako in mainland Auckland. It is also the habitat for a number of rare and endangered fauna and flora including the long-tailed bat, Hochstetter's frog and kākā. The Hunua Ranges provide habitat to a number of other indigenous species including kererū, bellbird, tomtit, tūī and pīwakawaka (fantail).
12. Ongoing control of animal pest predators is essential to ensure the protection and restoration of these native species and ecosystems. As the parkland manager, council has a responsibility for the delivery of this function and to meet targets relating to animal pest control as described in the Regional Parks Management Plan and Long-term Plan 2015-2025.
13. The Hunua Ranges has a long history of pest control, particularly following the discovery of only one breeding pair of kōkako in the early 1990s. For example, aerial application of 1080 was used in 1994 to reduce pest densities and, subsequent to this, a range of ground based methods for pest control have been applied. More recent methodology has involved the use of brodifacoum in bait stations to target rats in the kōkako management areas along with traps to control stoats. A roaming programme of possum control has been carried out on an annual basis across the Hunua Ranges using cyanide and focussing on areas identified through monitoring as having higher possums densities. Neighbouring landowners such as the Department of Conservation (DOC) have applied 1080 aerially in the adjoining Mangatawhiri and Vinings Reserves in 2001 and 2006.
14. Consistent with a national trend, monitoring in the Hunua Ranges during 2014 showed high and increasing rat and possum populations. This increase in pest numbers posed a significant risk to the unique wildlife, their habitats and high ecological values of the park.
15. The pest control methods being used in the regional parklands were no longer effectively controlling pests to the levels required to ensure the significant ecological values were protected and the problem needed to be effectively addressed.

16. In October 2014, following workshops with local boards and the governing body, the Regional Strategy and Policy Committee considered a report on pest management options to address the problem of such high pest densities in the Hunua Ranges. The committee approved the recommended change in pest methodology for the Hunua Ranges regional parklands (Hunua Ranges, Waharau and Whakatiwai regional parks), to the aerial application of 1080, commencing in mid-2015.
17. As part of this decision, the Regional Strategy and Policy (RSP) Committee also established a Hunua Project Political Advisory Group made up of RSP members, a representative of the Independent Māori Statutory Board (IMSB) and a representative from the Franklin Local Board to 'work with staff in the planning and implementation phase of the aerial application of 1080 in the Hunua Ranges'. This group met regularly throughout the operational phase of the project.

Operational programme

18. Animal pest control programmes using aerially applied 1080 are complex and require thorough planning and implementation. Comprehensive communication is required particularly in areas where people live, recreate and work to ensure concerns are understood and that operational methodology is developed in a way that takes these into account along with ensuring non-target impacts on the environment are managed.
19. Agencies are required to meet the minimum standards set out in the controls of the Environmental Risk Management Authority's 2007 Decision on the reassessment of 1080, including any conditions of required permissions.
20. In order to ensure that the Hunua aerial 1080 operation was consistent with these requirements a number of operational workstreams were established these included:
 - Mana Whenua Engagement
 - Communication and Stakeholder Engagement
 - Operational Planning and Implementation

Summary of operation

Permissions and guidelines

21. Permissions for the operation were required and granted by the Medical Officer of Health, Auckland Regional Public Health Service and DOC for the DOC-administered lands. Resource consent for the operational area within the Waikato region, which is subject to the Waikato Regional Plan, was held and exercised by the operational contractor.
22. Aerial application of 1080 in the area of the Hunua Ranges that falls within the Auckland region is a permitted activity under the Auckland Council Regional Plan (Air, Land and Water), Auckland Council District Plan (Franklin, Manukau and Papakura sections) and the Proposed Auckland Unitary Plan.

Communication and engagement

23. Communication, stakeholder and mana whenua engagement plans were developed for the operation in accordance with the National Pest Control Agencies 'Aerial 1080 Pest Control Industry Guidelines' and the Environmental Risk Management Authority's 'Communications Guideline for Aerial 1080 Operations' and led by Auckland Council in collaboration with DOC for the lands they administer.
24. General communications activity throughout the operation included publishing stories in Our Auckland; issuing media releases at each stage of the operation and working with media on news stories; installing interpretive signs at major arrival points within the parklands; developing comprehensive web-based information and placing advertisements in local newspapers and newsletters.

Mana whenua engagement

25. Ngāi Tai ki Tāmaki, Ngāti Tamaoho, Ngāti Pāoa, Ngāti Whanaunga, Ngāti Te Ata, Ngāti Maru Runanga, Waikato-Tainui and Te Akitai have historical, customary, cultural and spiritual ties to the Hunua Ranges and were identified as having a significant interest in the proposed pest control operation.
26. Given the significance of the Hunua Ranges, a specialised mana whenua engagement plan was developed. The specific purpose of the plan was to ensure engagement was:
 - meaningful by engaging in the early stages of operational plan development
 - had regard to each other's consultation and engagement protocols so that mana whenua interests and values are addressed in development of planning and or delivery of services
 - ensured that engagement and consultation practices were accessible to mana whenua with concepts explained; timely and accurate answers that make sense to the end user are provided, resulting in the best outcomes for mana whenua
 - providing opportunities to be involved in the programme and on-going pest management.
27. As a result of extensive engagement involving written communication, hui, a workshop attended by technical experts and iwi from other areas, marae visits and follow-up discussions, mana whenua confirmed support for the operation and expressed particular interest in being directly involved in aspects of the operational planning and implementation.
28. This partnership approach included working alongside council officers to develop a cultural water monitoring programme, conducting a dawn blessing at the commencement of the operation and over the bait ahead of application, site meetings with decision makers and assisting with the collection of water samples and track clearance.
29. Following the operation, council has partnered with DOC to offer a six-month kaitiaki cadetship programme. The four successful cadets have worked alongside rangers in the southern regional parks to develop a range of skills and experience.

Operational agencies

30. The majority of Auckland's water supply (about 65 per cent) is sourced from the reservoirs within the Hunua Ranges. Watercare had a significant interest in the operation in its role as manager of the public water supply reservoirs and was represented on the project operational working group.
31. DOC has a shared boundary with the regional parklands. During the initial consultation phase it was determined DOC had plans to carry out pest control in the Mangatawhiri and Vining's reserves during the 2015/16 business year. Subsequently it was agreed that the adjoining DOC administered lands would be included in the operation which was confirmed by way of formal agreement.
32. The Hunua Ranges regional parklands are owned by Auckland Council but partly fall within the Waikato region. Auckland Council receives an annual contribution from Waikato Regional Council to deliver pest control on private land in accordance with the Auckland Regional Pest Management Strategy requirements. A letter of support for the Hunua pest control operation was provided by Waikato Regional Council and staff assisted during the operation.

Landowners and occupiers

33. Extensive communication was carried out with adjoining landowners and occupiers. This included an introductory letter and questionnaire to obtain property-specific information (confirmation of property boundaries, water takes and locations, and stock, dog or fencing issues) to assist with operational planning. This was followed up with face-to-face meetings where requested, phone calls, regular project updates, the provision of factsheets specific to adjoining properties and maps showing the operational area, and email and SMS text notifications.
34. Information on how to care for dogs during the operation and caution period was provided, along with an offer of muzzles and emetic treatments for dogs. During the operation, 115 muzzles were provided for dogs; staff were available to deliver and fit the muzzles when requested.
35. This landowner engagement also identified those property owners, with contiguous forested areas, that wanted their land treated during the operation.
36. In addition to direct communication with adjoining properties, a number of communications were sent to properties within three kilometres of the operational area.

General stakeholders

37. Information was provided to interested members of the public and a range of identified stakeholder groups including concessionaires, recreational groups, hunting permit holders, outdoor education providers, local conservation groups and non-governmental organisations. Over 1,800 contacts were placed on the project stakeholder database over the course of the operation. Schools, early childcare centres, medical providers, NZ Police and veterinary clinics were included in notifications.
38. Project information was available to the general public through council's website with pages dedicated to the project. A dedicated Hunua Project email address was also provided for enquiries and for people wishing to opt into the stakeholder database for more detailed project updates.

Consultation outcomes

39. As a result of early discussions with the operational agencies it was agreed that, given this was the first aerial operation in the parklands in over 20 years, the operation would be carried out with a more precautionary approach than is typical for other aerial 1080 operations. This acknowledged the need to provide education and communication around council activities that may raise community interest such as this project and to assure our communities that the safety of residents is at the forefront of our decision making and operational management.

Operation implementation

40. To manage both actual and perceived risk the operational area was split into two treatment blocks based on water catchment features (as per the map in Attachment A). This enabled the isolation of the water supply within each of the treatment blocks during application and until water monitoring had been completed.
41. During the planning phase the operational boundary was adjusted to include DOC administered land and private land where private landowners requested to be included, resulting in an increase in the treatment area from approximately 17,000ha of council-owned parkland to 21,500ha in total.
42. Mitigation strategies for domestic water takes were agreed with landowners. All extraction points were excluded and had setbacks placed around them. Drinking water was supplied to one property on request and one water tank was covered. Monitoring was also carried out for properties that requested it. Potable water was made available at Wharekawa Marae to any members of the community not subject to specific mitigation who wanted an alternate - this offer was not taken up by anyone.

43. Setbacks were increased for some properties where there were issues with livestock fencing and council provided temporary electric fencing to one landowner whose boundary fence was insecure. Another boundary fence was replaced with joint contributions between council and the land owner and a further fence was repaired.
44. The treatment of the two blocks was carried out by qualified pest control contractors in three stages:
- Stage One: Aerial application of non-toxic pre-feed bait over Block One (Mangatawhiri and Wairoa and adjoining out of catchment areas including Mangatawhiri Forest Conservation Area and Vining Scenic Reserve).
 - Stage Two: Aerial application of non-toxic pre-feed bait over Block Two (Mangatangi and Cosseys catchments and adjoining out of catchment areas) and aerial application of toxic bait over Block One.
 - Stage Three: Aerial application of toxic bait over Block Two.
45. The treatment methods for each of the operational stages are detailed in Table One below.

	Block One: Mangatawhiri and Wairoa and adjoining out of catchment areas including Mangatawhiri Forest Conservation Area and Vining Scenic Reserve	Block Two: Mangatangi and Cossey catchments and adjoining out of catchment areas
Block Size	8,896 ha	12,515 ha
Pre-feed Application		
Date of application	30 July 2015	22 August 2015
Type of bait	ACP Wanganui RS 5, 16mm, 6g cereal pellets	ACP Wanganui RS 5, 16mm, 6g cereal pellets
Sowing rate	1.5 kg/ha	1.5 kg/ha
1080 Application		
Date of application	21 August 2015*	14 September 2015
Type of bait	ACP Wanganui RS 5, 20mm, 12g cereal pellets, 1080 @ 0.15 per cent	ACP Wanganui RS 5, 20mm, 12g cereal pellets, 1080 @ 0.15 per cent
Sowing rate	2.5 kg/ha	2.5 kg/ha
Lures added	Double strength cinnamon	Double strength cinnamon
Repellents added	None	None

* Some small gaps (less than 15ha) between flight lines were treated on 22 August 2015

Table One: Hunua Project Treatment Details

46. Following the toxic bait application, all roads, tracks, amenity areas and campgrounds were manually cleared of baits by council staff with assistance from mana whenua, DOC, volunteers and Waikato Regional Council. This included approximately 168km of tracks and roads.
47. All areas were required to be checked and cleared of baits from each direction within 24 hours and 72 hours of application. High use areas were checked a third time after 120 hours. In most instances, a minimum of three people were required for short distance walking tracks, with a greater number of people required for longer tracks and roads.
48. A high degree of planning and coordination was put in place to ensure the large number of teams operating within the park at different times in a range of conditions were able to do so safely.

49. A number of aspects of the operational programme were audited by the Auckland Regional Public Health Service including:
- confirmation of consultation, in particular with neighbours
 - placement and presence of warning signage
 - loading site operations, and
 - track clearance.

Results to Date

50. Following completion of bait application, monitoring of post-operational pest densities has been completed. The targets for the operation were a reduction in possum and rat densities to below 5 per cent tracking or trapping index and this has been successfully achieved. Of particular note was the reduction in rat densities across the operational area from 91.6 per cent pre-application to 1.03 per cent post the operation.
51. Significantly, no rats were detected at all in the monitoring carried out in the Kōkako Management Area following the operation or in three subsequent monitors carried out at six-weekly intervals.
52. The final monitoring results for are summarised in Table Two below.

Result Target	Treatment Block	Pre-operation Monitoring Results	Post-operation Result
Possums			
Less than 5% Residual Trap Catch (RTC) for treatment area	Block One	October 2014: 11% RTC*	0.25%
Less than 5% Residual Trap Catch for treatment area	Block Two		1.00%
Rats			
Less than 5% Tracking Tunnel Index in Kōkako Management Areas (KMA and Piggots)	Traversed both blocks	KMA late July: 34% RTI	0%
Significant reduction in Tracking Tunnel Index across wider treatment area (pre-operational result 91.6%)	Both Blocks	May 2015: 91.6% RTI	1.03%

*Note: These results were considered to be an underestimate of possum densities as monitoring lines were impacted by high levels of rat interference. The highest line recorded was 52.6%

Table Two: Animal Pest Monitoring Results

Species monitoring

53. A number of outcome monitoring programmes will be conducted throughout 2016. These include kōkako fledging success, general forest bird survey, Hochstetter's frog and long-tailed bat presence/absence and vegetation recovery using fixed photo-points.
54. At the time of writing this report, 13 kōkako chicks have successfully fledged from the six monitored pairs with some of these pairs currently re-nesting. This compares with no chicks from monitored pairs hatching in the 2014/2015 breeding season. A survey of Hochstetter's frog has been complete and will continue in April 2016. The initial survey has shown the on-going presence of frogs following the 1080 bait application.

Water monitoring

55. An extensive water monitoring programme was completed for the four public drinking reservoirs ahead of them being returned to service. This included monitoring following a high rainfall event in the Mangatawhiri and Wairoa catchments. Over 300 water samples were taken from the public reservoirs, private water takes and cultural monitoring sites.
56. No 1080 was detected in any of the samples collected.

Operational challenges

57. During the operation there was some peaceful protest, some incidents involving people and dogs inside the operational area and one confirmed dog death as a result of 1080 poisoning. Of the small number of incidents that arose during the operational programme the most common were the multiple public incidents ignoring park closure signs and advice about the potentially fatal risks to dogs.
58. On the days of bait application and until the track clearance programme was completed the regional parklands and tracks on Department of Conservation administered land were closed to the public. All gates into the regional parklands were locked and track entrances outside the locked gates were posted with closure signs and blocked with tape. In addition information was posted on council's website and publicised through our networks and the media. Despite these measures two members of the public were encountered walking and running inside the operational area on the day immediately after bait application. Both were aware that the parklands were closed and had deliberately chosen to ignore the signage and barriers in place. Both visitors were accompanied out of the operational area to ensure their safety.
59. Similar issues with visitors ignoring the park closure were encountered at Hunua Falls which was excluded from the operation but closed to the public to prevent access into the parklands beyond. To enter this area people had to climb over a locked gate displaying the park closure signs and information on the reason for this. Following these incidents additional measures were taken following the application of bait to Block One to increase awareness of park closures by placing 'park closed' tape over directional destination signs and physically boarding up the bridge to the Hunua Falls walkway.
60. One complaint was received following the death of a dog belonging to a property adjoining the operational area. Toxicology reports confirmed the dog had died as a result of secondary poisoning from 1080. A second dog death was also reported to council but was unable to be confirmed as being as a result of 1080 poisoning.
61. Five dogs were also encountered within the operational area immediately after bait application. In all instances staff were able to safely remove them from the operational area. As detailed above specific measures were put in place to manage the risk to dogs from secondary poisoning and staff were on hand to help, providing muzzles for dogs living in close proximity to the area.

Financials

62. In 2014 DOC identified \$17 per/hectare as the average cost of its aerial 1080 operations. This data was used to inform the initial costings for council's project, as detailed in the October 2014 report the Regional Strategy and Policy Committee seeking approval for this project.
63. Following a competitive procurement process for the Hunua project (supply, transportation and aerial application of 1080 baits) the final contract price for the operation was \$541,268 or approximately \$25 per hectare which included the treatment of DOC administered land and adjoining private land. This cost was spread across the 2014-15 and 2015-16 financial years.
64. The final contract price reflected increased establishment costs resulting from adjusting the operation to manage the catchment areas more cautiously. This meant having two separate blocks, the use of a trickle bucket to treat the operational boundary and reservoir perimeters. Changes to bait formulation and sowing rates based on monitoring results were also factors.

65. DOC contributed both in-kind and financial support for the treatment of its land and Waikato Regional Council's annual contribution towards pest control around the Hunua Ranges was directed into the treatment of Waikato-based private land where landowners had sought to be included in the operation.
66. Council's previous investment targeted at possums, rodents and stoats did not provide control over the whole of the Hunua Ranges parklands but was directed to areas where densities exceeded target measures. This control generally covered only a fraction of the Hunua Ranges regional parklands at a combined cost of \$473,000 annually. From this budget possum control was delivered across the park on a rotational basis at a cost of approximately \$358,000 (excluding monitoring costs) per annum.
67. Due to the success of the aerial 1080 operation no further possum control is planned for the Hunua regional parklands until winter 2017. The resultant budget efficiencies will be directed into animal pest management at other high priority sites determined through current ecosystem prioritisation work and assisting neighbours to establish and maintain pest control measures which will enhance overall protection.

Future Pest Management

68. The 2015 aerial pest control operation will formally conclude with the end of the caution period, which is being informed by bait and carcass breakdown monitoring. Based on monitoring results to date this is expected to occur in mid-March, at which time all warning signs will be removed and stakeholders advised.
69. Following this operation the current management focus in the Hunua Ranges regional parklands is continuing with outcome monitoring to measure resultant changes in ecological condition and monitoring of animal pests, particularly in the kōkako management areas, to inform any interim control requirements.
70. The benefits resulting from successful pest reduction across the Hunua Ranges regional parklands are expected to last through until 2017 upon which time pest densities are likely to have increased to the level requiring further control.
71. Range-wide pest monitoring will therefore be carried out in 2016/17 to inform the requirements and methods for the 2017/18 Hunua Ranges pest control programme. In the absence of more effective large-scale pest control alternatives, a further aerial operation using 1080 is considered likely to be necessary to maintain the gains made through the 2015 operation and to support species reintroductions.
72. In addition to reviewing current pest control methodologies, investment is being made in the development of new technology and methodologies. This includes the use of camera traps as a tool for multi-species pest monitoring and testing the efficacy of self-resetting traps out in the field. The biosecurity team is also supporting the trial of a radio-based network communications platform as a means of remotely monitoring trap activity. This technology, if effective, also has broader application to monitor transmitters on pests or native species saving significant time in manual field searches.
73. Through the 2015 operation a number of neighbours indicated a strong willingness to manage pests on their adjoining properties and the biosecurity and biodiversity teams within council are working through how this can be supported and expanded into the future.
74. While protecting existing values within the regional parklands, the range wide reduction in pest densities also raises the possibility of reintroducing indigenous species that would have historically been present within the area or would benefit from becoming established at an additional location. The reintroduction of species is conditional on the maintenance of low pest densities within the area. Preliminary discussions have been had with DOC and mana whenua about the possible reintroduction of North Island brown kiwi which will continue to be explored.
75. The effective reduction of pests is an on-going challenge throughout the region, particularly for larger high value ecosystems which have shown similar increases in pest densities to those of the Hunua Ranges.

76. Learnings from the Hunua pest control operation are currently being assessed and their application to other sites being considered. These findings along with a review of existing pest control practices will be reported to an upcoming meeting of the April Regional Strategy and Policy committee.

Consideration

Local Board views and implications

77. Local board members were invited to a workshop held with members of the Regional Strategy and Policy Committee in September 2014. The purpose of this workshop was to enable discussion on the challenge, methodology and the alternatives ahead of the Regional Strategy and Policy Committee meeting on 9 October 2014.
78. At the October Regional Strategy and Policy committee meeting the Franklin Local Board confirmed general support for the proposed change and noted that the health of the Hunua Ranges over a wide spectrum is incredibly important to not only the local board but the local and wider community.
79. A resolution of the 9 October 2014 meeting was the establishment of a political advisory group to work with staff in the planning and implementation phase of the aerial application of 1080 in the Hunua Ranges. A Franklin Local Board member was appointed to the political advisory group.
80. Regular workshops and communication with the local board occurred throughout the project with good support from the board. The Franklin Local Board representative also attended field trips, hui with mana whenua and contributed to local media communications on the project.

Māori impact statement

81. The Hunua Ranges are of historical, customary, cultural and spiritual significance to Ngāi Tai ki Tāmaki, Ngāti Koheriki, Ngāti Tamaoho, Ngāti Pāoa, and Ngaati Whanaunga. Two iwi also have kaitiakitanga status; Ngati Maru Ruanga, Ngati Te Ata Waiohua and Tainui – Waikato.
82. The maunga Kohukohunui is the highest peak within the Hunua Ranges, is a tūpuna maunga and an important boundary marker. Kōkako are a highly valued taonga species and mana whenua have been active partners in enabling kōkako recovery in the park including the translocation of birds to increase the population's genetic diversity. The reduction in pest densities offers protection of existing values and the possibility of species reintroductions in the future.
83. The Regional Parks Management Plan 2010 recognises the relationship of mana whenua in the Hunua Ranges and includes consultation on the planning, protection, development and management of the park and Māori values they contain - Policy: 17.5.4 20 (a).
84. Officers worked with Te Waka Angamua who provided tautoko and support for engagement with iwi. A priority was to ensure appropriate tikanga for relevant iwi and mana whenua is practiced and opportunities to be involved in the project planning and implementation provided.
85. Ngāi Tai ki Tāmaki, Ngāti Tamaoho, Ngāti Pāoa, Ngāti Whanaunga, Ngāti Te Ata, Ngāti Maru Runanga, Waikato-Tainui and Te Akitai were identified as having a significant interest in the proposed pest control operation. An extensive engagement approach was developed through a mana whenua engagement plan as described in the engagement section above.
86. This engagement allowed for effective Māori communication with mana whenua, a contribution to kaitiaki outcomes through the reduction of pest densities, the protection of significant ecological values and wai (water) monitoring and the development of Māori capacity through both direct involvement in the project and the newly established kaitiaki cadetship programme.

87. In addition to direct engagement with mana whenua, an Independent Maori Statutory Board member was elected to the project's political advisory group.
88. The potential re-use of 1080 in the Hunua Ranges has been discussed with mana whenua. Discussion has focused on the use of best practice to control predators and our commitment to keeping up with new technologies. The re-use of 1080 or the use of toxins generally within the range is something that mana whenua would like to see council operations moving away from. This noted, staff have conveyed that in the short-medium term if pest densities increase to levels that pose a risk to native species and ecosystems and in the absence of other solutions, it is likely to be used again. If this is the case mana whenua engagement in line with the mana whenua engagement plan for this project will be applied.

Implementation

89. There are no additional implementation issues of note.

Attachments

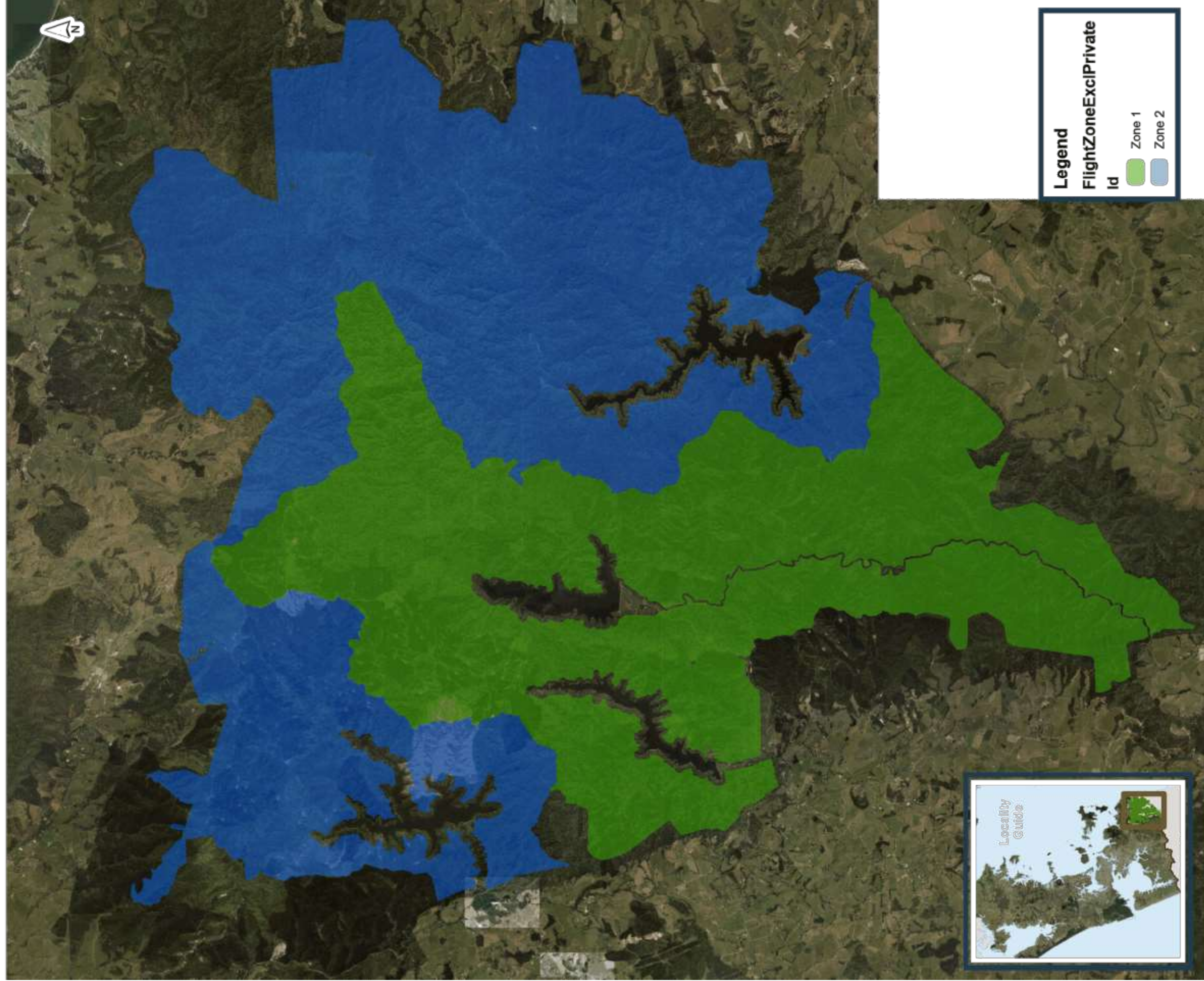
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Signatories

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Map

Auckland Council



Legend
FlightZoneExclPrivate

Id	Zone
1	Zone 1
2	Zone 2

0 375 750 1125 1500
Metres

Scale @ A3
= 1:67,142

Date Printed:
9/09/2015

Hunua Project FY16
Flight Zones, Excl Private Properties
Hunua Ranges, Auckland

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Attachment A

Item 11