

Quarterly Progress Report

For the Department of Conservation

Project: Predator Free Rakiura

Report Author: s9(2)(g)(ii)

Period: Q1 FY26

Reporting against: FY26 Annual Plan: Predator Free Rakiura (to be finalised)

Overall progress

A major milestone was achieved on 22 August with the completion of Phase 2 of the eradication trial, covering ~7,000 hectares within the ~43,000-hectare aerial operation to protect Pukunui. The trial is testing the 1080 to Zero approach on all three rat species (ship rats, Norway rats, and kiore), across multiple habitats and with/without deer repellent. ZIP's extensive trail camera network continues to monitor target and non-target (deer) species, providing pre-, during-, and post-trial data to evaluate efficacy. Results are expected by the end of the year.

Lab trials by Cawthron Institute on 1080 cereal pellets in still seawater showed a half-life of ~4 hours for Dry Forest bait (full diffusion in ~24 hours), and ~13 hours for Wet Forest bait (full diffusion in ~72 hours). Cawthron Institute are writing these results up in a report that we will make publicly available.

The camera-based trial to assess deer repellent efficacy with white-tailed deer was unable to determine a result, due to significant interference from rats and possums. 90% of all bait was eaten by those species before deer had a chance to encounter it. Of the 126 deer encounters with bait present, only 1 bait was consumed. A report (from Manaaki Whenua) has been published and is now publicly available.

CEBRA have completed their initial biosecurity risk pathway model and are now in the process of developing the model further with additional data following an expert elicitation workshop. CEBRA are on track to complete the risk pathway analysis and report in December 2025.

ZIP's communications and engagement programme is progressing, with regular newsletters reaching ~300 stakeholders. The Rakiura team now comprises six FTEs, including a newly created Kaitohutohu Tikanga/Cultural Advisor role, supporting Ngāi Tahu aspirations projects and enhancing cultural engagement.

Looking forward

Results from the 1080 to Zero trial on Rakiura for all three rat species are expected by the end of the year. Lab trials of 1080 on Norway rats and kiore will also continue, in order to generate statistically robust sample sizes.

s9(2)(b)(ii)

Results from the white tailed deer monitoring through the aerial operation to protect pukunui – with deer repellent, without deer repellent, and from a non-treatment site – are expected before the end of the year. The majority of cameras have been serviced and the data is now with Manaaki Whenua to review, analyse and report.

An exercise using rodent detection dogs to conduct voluntary checks of ferry passenger luggage and freight bound for Rakiura will take place during October and November. This exercise is expected to provide data on two potential significant risk pathways, which will further inform the CEBRA risk pathway model.

Results from the toxin trials will inform the ongoing programme of work, and any adjustments necessary will be made to the Annual Plan.

Milestones

FY26 Milestones		Due	Status	Commentary
<i>Project Management</i>				
1	PFR Ltd Board meetings	All	Complete	The PFR Board met on 19 August. Next meeting planned for 21 November.
<i>Building Social Capital</i>				
2	Community hui held to provide field trial results (in conjunction with pukunui operation)	Q3	Future	n/a
3	Initiate the first 'Ngāi Tahu aspirations' project	Q4	Future	Exact nature of this project is still to be determined.
<i>Developing New Knowledge and Technologies</i>				
4	1080 bait (incl. with deer repellent) lab trials with rats completed	Q3	In Progress	Laboratory trials are underway with all three rat species and four bait/lure combinations to replicate the 1080 to Zero approach (a two-phase method with double prefeeding prior to toxin exposure) to assess its overall effectiveness. s9(2)(b)(ii)
5	Trial on how 1080 behaves in sea water complete (with decision made on next trial needed, if any)	Q1	Complete	ZIP commissioned the Cawthron Institute to study what happens if a 1080 bait pellet falls into seawater. The research tested two bait types, "wet forest" (water-resistant) and "dry forest" (breaks down quickly), to measure how fast the 9 mg of 1080 in a 6 g pellet diffuses into the water. Results showed a half-life of ~4 hours for Dry Forest bait (full diffusion in ~24 hours), and ~13 hours for Wet Forest bait (full diffusion in ~72 hours). A multi-weather scenario model is now in development to examine how ocean dynamics influence dilution and what this "infinite dilution" means for risks to fisheries species.
6	s9(2)(b)(ii)	Q2	In Progress	s9(2)(b)(ii)

7	s9(2)(b)(ii)	Q2	In Progress	s9(2)(b)(ii)
8	s9(2)(b)(ii)	Q3	Future	n/a
9	Field trial of toxic rodent bait with feral cats underway	Q4	Future	n/a
10	First A.I. algorithm for Norway rats and kiore completed	Q3	Future	n/a
11	Iridium satellite gateway (in lieu of 4G coverage) released for production	Q2	In Progress	This development remains a priority for ZIP, though its timeline has shifted. The most urgent use case for an Iridium satellite gateway is in the PFSW backcountry, in places where there is no line of sight to existing gateways for 4G coverage. The 4G terrestrial network has provided better coverage than expected, and the A.I camera network rollout is now prioritising front-country sites. As a result, this work has become less urgent, with completion now anticipated by the end of Q3. Within PF Rakiura, the priority of this development project will depend on the upcoming operational programme, which will be informed by the results of the eradication trial.
Operational Planning and Implementation				
12	Efficacy of ProDeer on minimising impact of white-tailed deer from aerial 1080 understood	Q3	In Progress	We commissioned a deer repellent trial earlier this year to improve our understanding of the efficacy of deer repellent baits for whitetail deer on Rakiura/Stewart Island. The trial was designed by Manaaki Whenua-Landcare Research and conducted by our team around Oban. This trial was unable to confirm the repellency of Prodeer® to white-tailed deer on Rakiura/Stewart Island. There was virtually no consumption of either standard or repellent bait by deer when they encountered it (across 126 visits). The trial experienced significant interference from rats and possums, which together ate 90% of the bait in the first three nights that it was available (hence there were only the 126 visits by deer to baits).

				Trail camera monitoring of white-tailed deer before and after the aerial operation to protect pukunui will enable us to compare detections within standard and repellent baited blocks. This data is expected to provide a more comprehensive understanding of the efficacy of deer repellent on whitetail deer. At the time of writing, images from 100% of deer cameras in the treatment blocks and 50% of cameras in the non-treatment block have been collected and sent to Manaaki Whenua for analysis. Depending on the number of images, they anticipate providing provisional results by the end of the year, and a final report early in the new year.
13	Efficacy of 1080 to Zero on all three rat species on Rakiura determined from eradication trial camera networks	Q2	In Progress	A network of trail cameras has been monitoring rat activity for two months before and two months after the operation. Final data from the cameras will be collected within the next fortnight, weather permitting. Image 'classification' is being carried out through a combination of A.I-assisted filtering and manual review to differentiate between the three rat species. Results are expected by the end of November. Very preliminary post-operation findings have been shared with a small DOC management group. Insights from the eradication trial monitoring will inform future Predator Free Rakiura operational planning.
14	Decision made on whether to proceed with first eradication operation in Pegasus block	Q4	Future	n/a
15	Complete the risk pathway analysis in partnership with CEBRA	Q2	In Progress	CEBRA have completed their initial biosecurity risk pathway model; and are now in the process of developing the model further with additional data following an expert elicitation workshop and detection dog voluntary searches of luggage and freight. CEBRA are on track to complete the risk pathway analysis and report in December 2025.
16	Initiate a proof-of-concept biosecurity project	Q4	Future	n/a

Health and Safety

Health and Safety responsibility sits with the PFR Ltd and ZIP Boards. DOC's SLO is privy to all H&S information (including safety plans, incident reporting, and management responses) and is part of these discussions at the Board meetings.

Financial performance

The Q1 financial performance (actuals to budget), and current full year budget are provided below.

PREDATOR FREE RAKIURA	Q1 2025			Full Year Budget
	Actual	Budget	Variance	
INCOME	1750	2500	-750	7000
EXPENSES	1200	1409	208	4309
Operations	885	395	-490	1463
Overheads and Salaries & Wages	89	858	769	2222
Share of Development Costs	226	156	-71	623
NET INCOME	550	1091	-542	2691
Capital Expenditure	6	0	-6	0
Net Cash Surplus/(Deficit)	544	1091	-547	2691
Opening Balance	1330	1330		1330
Closing Balance	1874	2422		4022

Quarterly Progress Report

For the Department of Conservation

Project: Predator Free Rakiura

Report Author: s9(2)(g)(ii)

Period: Q2 FY26

Reporting against: FY26 Annual Plan: Predator Free Rakiura (to be finalised)

Overall progress

An elimination trial covering approximately 7,000 ha was undertaken as part of the aerial operation to protect pukunui, to test the effectiveness of 1080 across all three rat species. Images have been analysed from a network of 525 trail cameras across three intensive rat monitoring grids. Results indicate a substantial knockdown of rats; s9(2)(b)(ii)

s9(2)(b)(ii)

s9(2)(b)(ii)

Monitoring of deer through the pukunui operation (across deer repellent, non-repellent and non-baited blocks) has been completed, with data analysed by Manaaki Whenua. Results are planned for release to interested hunting groups and the wider public in February, with DOC and ZIP coordinating the timing and approach to release.

Looking forward

s9(2)(b)(ii)

Future eradication options are being worked through with DOC, and any necessary adjustments will be reflected in the Annual Plan. Based on the combination of rat survivorship detected during

the trial and a predicted mast event, a decision has been made not to undertake further large-scale aerial operations in 2026.

Released under the Official Information Act

Milestones

FY26 Milestones		Due	Status	Commentary
<i>Project Management</i>				
1	PFR Ltd Board meetings	All	Complete	The PFR Board met on 12 December. Next meeting planned for 26 February.
<i>Building Social Capital</i>				
2	Community hui held to provide field trial results (in conjunction with pukunui operation)	Q3	Superseded	Delivery of a broad public hui to share field trial results is not considered appropriate at this stage. Instead, results will be communicated through targeted briefings with key hunting and stakeholder groups, reflecting current community sentiment and risk considerations. A wider public meeting on Rakiura may take place in late April or early May, aligned with DOC's presentation of final pukunui results following the annual Awaroa flock count. However, this is yet to be confirmed.
3	Initiate the first 'Ngāi Tahu aspirations' project	Q4	Future	Exact nature of this project is still to be determined.
<i>Developing New Knowledge and Technologies</i>				
4	1080 bait (incl. with deer repellent) lab trials with rats completed	Q3	In Progress	Laboratory trials are almost complete for all three rat species and four bait/lure combinations to replicate the 1080 to Zero approach (a two-phase method with double prefeeding prior to toxin exposure) to assess its overall effectiveness. So far, we have completed trials on ship rats; have 75% of the sample size needed for Norway rats; and 33% of the sample size needed for kiore (more kiore are currently being procured). s9(2)(b)(ii)
5	Trial on how 1080 behaves in sea water complete (with decision made on next trial needed, if any)	Q1	Previously Complete	See Q1 report

6	s9(2)(b)(ii)	Q2	Delayed	s9(2)(b)(ii)
7	s9(2)(b)(ii)	Q2	Delayed	s9(2)(ba)(ii)
8	s9(2)(b)(ii)	Q3	Future	n/a
9	Field trial of toxic rodent bait with feral cats underway	Q4	Future	n/a
10	First A.I. algorithm for Norway rats and kiore completed	Q3	Future	n/a

11	Iridium satellite gateway (in lieu of 4G coverage) released for production	Q2	Delayed	This development remains a priority for ZIP, although its timeline has shifted. Good progress has been made on a consolidated gateway capable of communicating across multiple networks (Iridium and SWARM satellite, as well as 4G). The gateway can transmit via whichever network is available, providing increased system redundancy. Prototype testing of the consolidated gateway is now underway. Initial rollout will begin in PF South Westland, focusing on locations without line-of-sight to existing 4G gateways. Within PF Rakiura, the priority and timing of further rollout will be determined by the revised operational programme, which will be informed by the results of the eradication trial and discussions with DOC and funders.
<i>Operational Planning and Implementation</i>				
12	Efficacy of ProDeer on minimising impact of white-tailed deer from aerial 1080 understood	Q3	In Progress	Trail camera monitoring of white-tailed deer before and after the aerial operation to protect pukunui has been analysed by Manaaki Whenua to compare detections within standard and repellent baited blocks. s9(2)(b)(ii) Results will be publicly released by DOC in February.
13	Efficacy of 1080 to Zero on all three rat species on Rakiura determined from eradication trial camera networks	Q2	Complete	Data from the three grids of trail cameras was analysed for the two months before and two months after the operation to assess changes in rat activity. Results indicate that while the trial achieved a high kill of ship rats, sufficient numbers of rats remained to prevent eradication. Although some surviving individuals could not be conclusively identified, imagery suggests that most were kiore and Norway rats. These results have now been made publicly available.

				The findings are informing future Predator Free Rakiura operational planning (and the finalisation of the PF Rakiura Annual plan we report against).
14	Decision made on whether to proceed with first eradication operation in Pegasus block	Q4	Future	n/a
15	Complete the risk pathway analysis in partnership with CEBRA	Q2	Complete	The biosecurity risk pathway assessment work by CEBRA has been completed and will be used to develop the first version of a pathway management plan.
16	Initiate a proof-of-concept biosecurity project	Q4	Future	n/a

Health and Safety

Health and Safety responsibility sits with the PFR Ltd and ZIP Boards. DOC's SLO is privy to all H&S information (including safety plans, incident reporting, and management responses) and is part of these discussions at the Board meetings.

Financial performance

The Year-to-Date financial performance (actuals to forecast), and current full year forecast and original budget are provided below.

The main variances are less income received than forecast (this is due to delays in funding payments received); and reduced operational expenses (as a result of deferring the first elimination operation in light of the rat results and upcoming mast). A full project re-forecast is expected to be completed by early Feb.

\$000's PREDATOR FREE RAKIURA	6mths to 31-Dec-26			Full Year Forecast	Full Year Budget
	Actual	Forecast	Variance		
INCOME	2,500	3,250	-750	7,000	7,000
EXPENSES	1,873	2,725	852	5,073	5,076
Operations	842	1,772	930	2,123	1,463
Overheads and Salaries & Wages	777	571	-206	2,256	2,989
Share of Development Costs	254	382	128	694	623
NET INCOME	627	525	102	1,927	1,924
Capital Expenditure	6	6	0	6	0
Net Cash Surplus/(Deficit)	621	519	102	1,921	1,924
Opening Balance	1,330	1,330	0	1,330	1,330
Closing Balance	1,951	1,849	102	3,251	3,255

Quarterly Progress Report

For the Department of Conservation

Project: Predator Free Rakiura

Report Author: s9(2)(g)(ii)

Period: Q3 FY26

Reporting against: FY26 Annual Plan: Predator Free Rakiura (to be finalised)

Overall progress

Outcomes of the aerial operation to protect Pukunui

The Pukunui breeding season is drawing to a close, and all signs are pointing to a very successful year. DOC's banding work to date has highlighted improved survivorship at all three locations: 100% at Awarua Bay, 94% at Mason Bay and 79% at Cook Arm. Preliminary flock count estimates range from a minimum of 130 birds and are likely to increase – final official count results are due in late April. This is already being described as an unprecedented population increase in the 32-year programme history.

s9(2)(b)(ii)

Whitetail deer monitoring

The deer monitoring conducted during the pukunui operation showed a significant reduction in whitetail deer activity – 97% in areas where deer repellent was not used, and 75% in the hunting block area where repellent was used. Approximately 10% of the bookable hunting area on the island was impacted. The final report (by Manaaki Whenua) has been released publicly, and the result has been discussed with the Rakiura Whitetail Trust, NZ Deerstalkers Assn, Game Animal Council, and other interested hunting groups. While the hunting interest groups were disappointed, their public reaction has been measured.

Modelling 1080 in saltwater

Cawthron Institute has completed its modelling work of hypothetical scenarios of 1080 bait in the sea around Rakiura. Modelling of the worst-case scenario suggests that the maximum 1080 concentration could reach c. 0.5mg/m³, which is less than one third of the long-term 1080 exposure limit for drinking water. The more realistic scenarios expected to produce concentrations of <0.1mg/m³, which is the lower limit of toxicity testing in water samples. In these more realistic scenarios, the exposure window is less than a day.

Looking forward

s9(2)(b)(ii)

Future eradication options are being worked through with DOC, and any necessary adjustments will be reflected in the Annual Plan. Based on the combination of rat survivorship detected during the trial and a predicted mast event, a decision has been made not to undertake further large-scale aerial operations in 2026.

We also anticipate the ongoing conflicts in the Middle East may impact operational costs.

Milestones

FY26 Milestones		Due	Status	Commentary
<i>Project Management</i>				
1	PFR Ltd Board meetings	All	Completed	The PFR Board met on 19 th March. Next meeting is scheduled for 28 th May.
<i>Building Social Capital</i>				
2	Community hui held to provide field trial results (in conjunction with pukunui operation)	Q3	Superseded	Delivery of a broad public hui to share field trial results is not considered appropriate at this stage. Instead, results have been communicated through targeted briefings with key hunting and stakeholder groups, reflecting current community sentiment and risk considerations. Plans to hold a public event on Rakiura in early May to present the results of the pukunui flock count. Details are being worked out between ZIP and DOC.
3	Initiate the first 'Ngāi Tahu aspirations' project	Q4	In Progress	ZIP along with Ngāi Tahu's communication team are putting together a storytelling project that explicitly concentrates on Ngāi Tahu perspectives around Rakiura biodiversity, places, and human history. This will occupy a portion of print, web and social media outputs for Rakiura over 2026.
<i>Developing New Knowledge and Technologies</i>				
4	1080 bait (incl. with deer repellent) lab trials with rats completed	Q3	In Progress	Laboratory trials are almost complete for all three rat species and four bait/lure combinations to replicate the 1080 to Zero approach (a two-phase method with double prefeeding prior to toxin exposure) to assess its overall effectiveness. So far, we have completed trials on 100% of ship rats; have 80% of the sample size needed for Norway rats; and 35% of the sample size needed for kiore. s9(2)(b)(ii) [REDACTED] [REDACTED]

				s9(2)(b)(ii)
5	Trial on how 1080 behaves in sea water complete (with decision made on next trial needed, if any)	Q1	Completed	See Q1 report
6	s9(2)(b)(ii)	Q2	Delayed	s9(2)(b)(ii)
7	s9(2)(b)(ii)	Q2	Delayed	s9(2)(b)(ii)

8	s9(2)(b)(ii)	Q3	Delayed	See milestone 7
9	Field trial of toxic rodent bait with feral cats underway	Q4	Future	Likely to occur in financial year 2027 to maximise efficiency of the field team being present on the island.
10	First A.I. algorithm for Norway rats and kiore completed	Q3	Delayed	The priority for this has shifted due to the delay in operational activity. Timing for this work will be determined by the revised operational programme, which will be informed by the results of the eradication trial and discussions with DOC and funders.
11	Iridium satellite gateway (in lieu of 4G coverage) released for production	Q2	Delayed	This development remains a priority for ZIP, although its timeline has shifted. Good progress has been made on a consolidated gateway capable of communicating across multiple networks (Iridium and SWARM satellite, as well as 4G). The gateway can transmit via whichever network is available, providing increased system redundancy. Prototype testing of the consolidated gateway is now underway. Initial rollout will begin in PF South Westland, focusing on locations without line-of-sight to existing 4G gateways. Within PF Rakiura, the priority and timing of further rollout will be determined by the revised operational programme, which will be informed by the results of the eradication trial and discussions with DOC and funders.
Operational Planning and Implementation				
12	Efficacy of ProDeer on minimising impact of white-tailed deer from aerial 1080 understood	Q3	Completed	Trail camera monitoring of white-tailed deer before and after the aerial operation to protect pukunui has been analysed by Manaaki Whenua to compare detections within standard and repellent baited blocks. s9(2)(b)(ii) Results have been publicly released by DOC.

13	Efficacy of 1080 to Zero on all three rat species on Rakiura determined from eradication trial camera networks	Q2	Completed	See Q2 Report
14	Decision made on whether to proceed with first eradication operation in Pegasus block	Q4	Completed	Due to the rat results, DOC and ZIP need to work on toxin options that will improve the chance of successful rat eradication. Therefore, the decision has been made to not proceed with any large-scale eradication operations on Rakiura for the calendar year 2026
15	Complete the risk pathway analysis in partnership with CEBRA	Q2	Completed	See Q2 Report
16	Initiate a proof-of-concept biosecurity project	Q4	Future	A proof-of-concept biosecurity project has been initiated, testing the efficacy of ground-based tools that would likely be used as part of the future detection network once eradication is complete. Sites were selected with the Rakiura Māori Lands Trust and will be scoped to determine the best site for a trial of approximately 6 ha.

Health and Safety

Health and Safety responsibility sits with the PFR Ltd and ZIP Boards. DOC's SLO is privy to all H&S information (including safety plans, incident reporting, and management responses) and is part of these discussions at the Board meetings.

Financial performance

The Year-to-Date financial performance (actuals to forecast), and current full year forecast and original budget are provided below.

The main variance is less income received than forecast, this is due to delays in funding payments received, with the outstanding funding now rescheduled into Q4. Expenditure is tracking just under year-to-date forecast. The full year forecast reflects our current expected year end position.

\$000's PREDATOR FREE RAKIURA	9mths to 31-Mar-26			Full Year Forecast	Full Year Budget
	Actual	Forecast	Variance		
INCOME	3,250	5,250	-2,000	7,000	7,000
EXPENSES	2,712	2,951	239	4,220	5,076
Operations	987	1,116	129	1,361	1,463
Overheads and Salaries & Wages	1,337	1,352	15	2,149	2,989
Share of Development Costs	388	483	95	710	623
NET INCOME	538	2,299	-1,761	2,780	1,924
Capital Expenditure	7	6	-2	6	0
Net Cash Surplus/(Deficit)	531	2,294	-1,763	2,775	1,924
Opening Balance	1,330	1,330	0	1,330	1,330
Closing Balance	1,861	3,624	-1,763	4,105	3,255

Pukunui Predator Control Operation 2025 Project Summary



Department of
Conservation
Tē Papa Atawhai



ZIP

ZERO
INVASIVE
PREDATORS
Enabling a new future



PREDATOR FREE
RAKIURA



s9(2)(g)(ii)

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Context

Pukunui | Southern New Zealand Dotterel (*Charadrius obscurus obscurus*) are one of the most threatened birds in New Zealand, largely due to predation by feral cats, as well as other predators. They breed only on Rakiura, primarily in the 'alpine' tops. With just 101 individuals remaining as of the 2024 census, the population has declined from 176 by an estimated 20% per annum since 2020 (**Figure 1**). While ground based control efforts (trapping and bait stations) have been used to protect the birds for the past 20 years, the population is not recovering. A major change in management action is needed now to save this species.

It was determined by the Department of Conservation (DOC) that an aerial 1080 *Pukunui Predator Control Operation* over key breeding grounds would give the birds the best chance at having a more successful breeding season in 2025/26. The current understanding is that the large home ranges of cats (upwards of 5km in length) mean ground-based control efforts do not cover a large enough scale to protect pukunui, when they are most vulnerable while present in their breeding habitat. By performing an aerial 1080 operation landscape scale control is achievable.

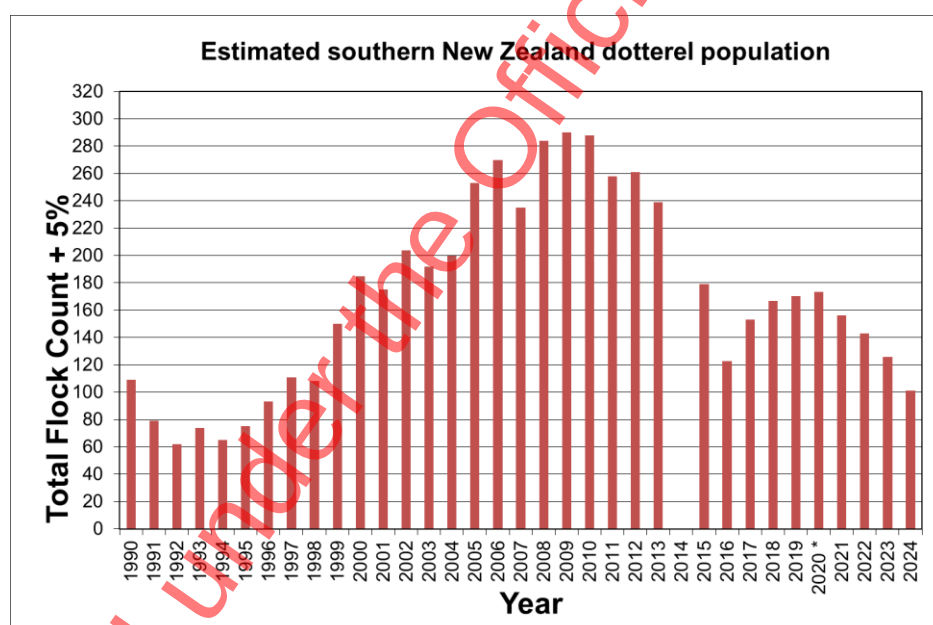


Figure 1 Pukunui population graph over time.

This operation was delivered by Zero Invasive Predators (ZIP) in partnership with DOC. In 2024, ZIP was brought on to lead the planning and operational delivery of Predator Free Rakiura (PFR), an ambitious and complex project that will support community and nature to thrive together by removing rats, possums, feral cats, and hedgehogs from Rakiura.

While the pukunui recovery operation was a standalone response to an immediate conservation crisis, it also presented an opportunity to gain critical insights into predator behaviour and control methods on Rakiura. Within this predator suppression operation to protect pukunui, a smaller area was sown to trial ZIP's '1080 to Zero' methodology in the Rakiura environment to determine the efficacy of this approach in the Rakiura context. This *Eradication Trial* was monitored intensively to inform future work towards Predator Free Rakiura.

The Pukunui Predator Control Operation was conducted in August of 2025, with the Eradication Trial conducted as part of the wider Pukunui operation between June-August 2025.

Aims

The Pukunui Predator Control Operation was a predator suppression operation to reverse the population decline of pukunui. Alongside the Eradication Trial, this was also an opportunity to learn about the use of different tools and techniques on Rakiura, ahead of planned wider eradication operations on the island, including;

- Use of deer repellent on target species efficacy and the impact on white-tailed deer
- Success of techniques trialled in the Eradication Trial Block
- Understanding cat re-incursion
- Operational and regulatory challenges that are unique to the Rakiura context

Target predators for these operations were rats and possums, with expected secondary kill of feral cats.

Operational Design

The treatment area of the Predator Control Operation block was centred on the prime pukunui breeding habitat – the Tin Ranges. Two other key breeding areas were also included: The Deceit Peaks & spot height 511 (**Figure 2**). There was a 5-kilometre buffer added around this area to effectively target all cats with a home range overlapping the breeding grounds, creating the basis for the scale of operational area. The Pukunui Predator Control Operation block covered approximately 43,000 ha (of which ~40,000 ha was treated). The Eradication Trial area covered approximately 6,500 ha within this wider operational area.

The operations were delivered in two operational ‘phases’ to allow for the Eradication Trial’s 1080 to Zero methodology. Each phase comprised of 1-2 non-toxic pre-feeds followed by the application of toxin. In 1080 to Zero method, the first phase typically removes the vast majority of predators, and the second phase, completed 1-2 months later, mops up any surviving predators. ‘Phase 1’ of the 1080 to Zero Eradication Trial operation was sown first in the smaller area within the Pukunui Predator Control Operation area. This was followed ~1 month later, by the Pukunui Predator Control Operation itself. The suppression operation covered the much larger area, and where it overlapped with the Eradication Trial treatment area it also constituted ‘Phase 2’ of the 1080 to Zero Eradication Trial.

Deer repellent was used within bookable hunting blocks under the treatment area in both phases. Deer repellent was requested for use in all areas possible by leadership for the New Zealand Deerstalkers Association and Game Animal Council, along with experienced local hunters, to reduce impact on deer populations in the blocks. It should be noted that the effectiveness of using deer repellent with white-tailed deer populations is not well understood.

Creating the best opportunity for a successful predator control operation was a critical factor in operational design decision-making, to give pukunui a chance at a good breeding season this year. However, the efficacy of using deer repellent on the target rat species (especially Norway rat and kiore) and the expected subsequent by-kill of feral cats is unknown. In comparison, non-repellent bait is known to be effective at targeting ship rats and possums, and can be assumed to be likely to generate high feral cat by-kill. In an acknowledgement of the value of the hunting resource to some Rakiura, deer repellent was used within bookable hunting blocks only, with non-repellent bait used in

the open hunting zone, including around pukunui breeding grounds. This design provided the opportunity to learn about the differences in target and non-target outcomes between repellent and non-repellent blocks (which is expected to have significant benefit for the planning of proposed future Predator Free Rakiura operations).

The treatment blocks were designed so that no toxic bait was sown into the ocean, as was requested by Southland Marine Farmers Association and CRA8 (on behalf of wild catch fisheries). This mitigated concerns regarding the perception of 1080 in the marine environment to foreign markets. Additionally, the ocean was deemed a 'no fly zone' during sowing.

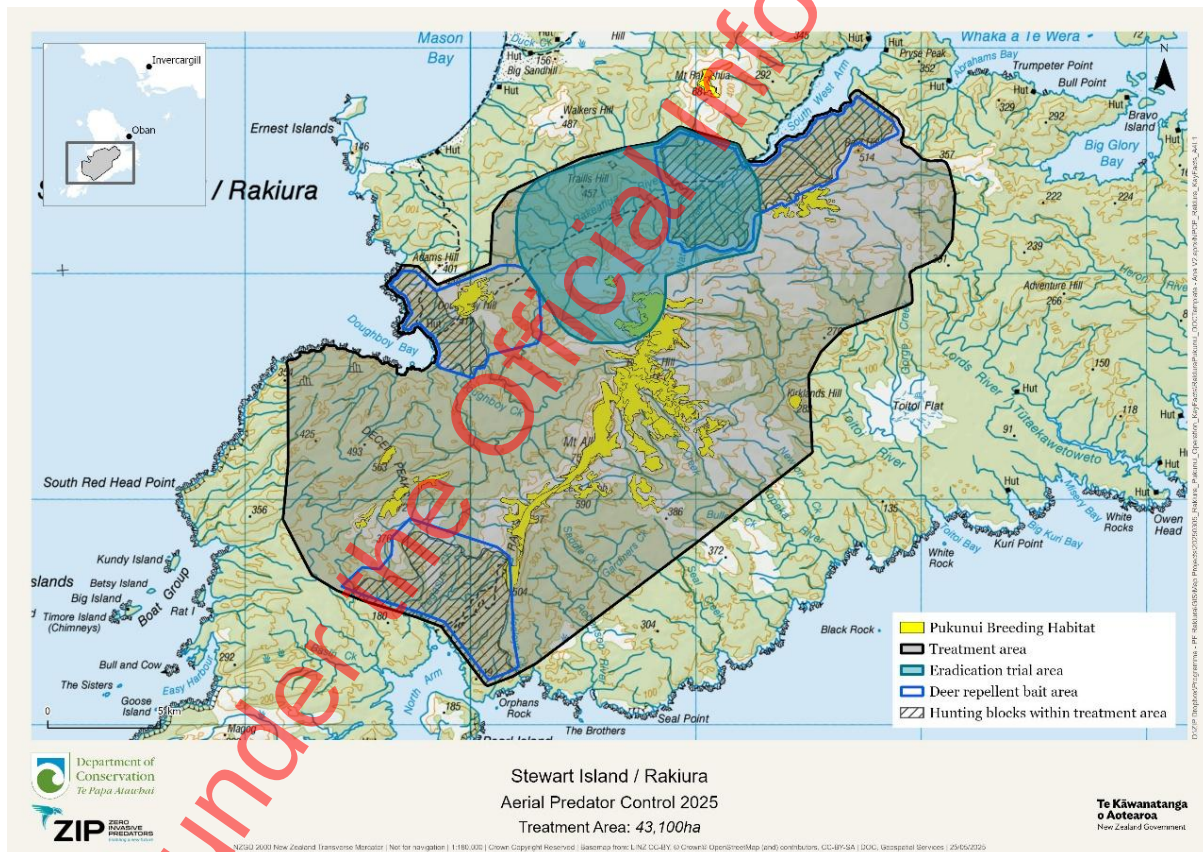


Figure 2 Pukunui Predator Control Operation area in relation to key pukunui breeding habitat, with smaller Eradication Trial show within.

Engagement

As part of the development, planning, and implementation for this project, widespread consultation was carried out by ZIP staff with support from the Department of Conservation. This has included meetings and information sharing with:

- Te Rūnanga o Ngāi Tahu
- Kaitiaki Roopū O Murihiku
- Local Rakiura community
- Hunting interest representatives
 - New Zealand Deerstalkers Association
 - Game Animal Council
 - Experienced Local Hunters

- Southland Marine Farmers Association
- CRA8 (on behalf of wild catch fisheries)
- Private landowners of adjacent land
- Rakiura Māori Lands Trust
- Environment Southland
- Southland District Council
- DOC Concession Holders
- Tourism operators
- Te Whatu Ora | Public Health Unit staff
- Te Papa Atawhai | Department of Conservation

Consultation involved community hui, drop-in sessions, mail-out fact sheets, phone calls, emails, and face-to-face visits.

Operational Timing

The timing of the Predator Control Operation was planned to maximise benefit for Pukunui, while ensuring that the operation could be delivered successfully. The aim was to deliver the toxic operation as close to the first week of September (1-7th) as possible to maximise protection during the pukunui nesting period (September – January), when they are most vulnerable to predators. However, timing was also constrained by the need to avoid the expected very unstable spring weather (high winds, rain) which typically begins from the last week of August.

	Treated area, hectares (ha)	Control method	Dates
Phase 1: Eradication Trial	Prefeed 1: 6,360 Prefeed 2: 6,400 Toxin: 5,770 See Appendix 1	Aerial 1080 2kg/ha prefeed x 2 4kg/ha toxin	Prefeed 1: 16-17 June 2025 Prefeed 2: 27 June 2025 Toxin: 6-8 July 2025
Phase 2: Pukunui Predator Control Operation	Prefeed: 39,870 Toxin: 39,740 See Appendix 2	Aerial 1080 2kg/ha prefeed 2kg/ha toxin	Prefeed: 3-4 August 2025 Toxin: 21-22 August 2025

Logistics

This was the first aerial operation of this scale on Rakiura. This posed large logistical challenges in terms of transporting bait, gear, and personnel. Multiple aspect of the operation differed from a standard mainland operation.

Load site

A land-based load site was selected for operational delivery, at Island Hill, near Mason Bay (**Figure 3**). Through consultation with wild fisheries and marine farming industries, the use of vessel-based load sites was ruled out for this operation due to concerns regarding the perception of 1080 in the marine environment to foreign markets.

Pukunui Aerial Operation - Loading Sites

Map exported: 2025-06-11



Figure 3 Location of Island Hill Load site, and vessel offloading locations (anchorage site was weather dependent)

Bait transport

Bulk bait bags (300 kg) were used for packaging of bait for this operation. This is the standard bait packaging for mainland operations where mechanical loading is utilised. In contrast, island eradications typically use 25 kg bags which are then hand loaded into the bucket for sowing.

The use of bulk bags had the advantage of mitigating health and safety risks by reducing both the number of people required to work under the helicopter and the duration of time people are beneath the helicopter. Additionally, it reduced the number of bags in proximity of the helicopter where they were at risk of flying up into the rotors. However, the use of bulk bags required mechanical loading, i.e. a gantry crane assembly, which was challenging to build in a remote island location.

A mechanical loading approach was developed for this operation that could be flown to and assembled on the Island Hill load site, enabling bulk bags to be used in this operation. For this operation, plywood pods to store bait (**Figure 4**), commonly used in island eradications, were constructed to protect bait from weather conditions through transport and storage.



Figure 4 a) Picture of two 300kg prefeed bags in a pod ready to be closed; b) a closed pod

Pods of bait were transported across Foveaux Strait via vessel. Vessels were loaded in SouthPort, Bluff, before crossing the strait and stationed in either Mason Bay (or South West Arm, alternate site if weather dictated) for offload. Once anchored, pods were slung from the vessel to Island Hill load site via helicopter.

Pods were stacked on platforms and covered with tarpaulins until sowing operations occurred.

Bait loading

A purpose-built mechanical bait loading system was developed for this operation. The use of telehandlers, tractors, or other more 'standard' machinery was deemed impractical, both due to the helicopter weight limitations and the damage they would likely have done to the site given the typically wet conditions.

The mechanical loading setup involved a large gantry crane (5.4 m high with a 7.5 m long centre rail) constructed on a timber platform (**Figure 5**). This was able to lift dummy hoppers containing 900 kg (3x 300 kg bags) of bait which was used to fill the helicopter sowing buckets (**Figure 6**). The materials for the platform and parts of the gantry were flown in and constructed onsite. Two platforms (each with gantry crane) were used during the operation.



Figure 5 Design of platforms and gantry cranes used in operation



Figure 6 Loading of a heli bucket from the gantry platform. Pods of bait are shown stored in the foreground on the platform

Fuel

Fuel was managed using a combination of tank trailers, flyable fuel tanks, and permanent fuel tanks at local heliports in Fern Gully, Oban, and Bluff. Between one to three tank trailers (1200-1500 L each) were lifted by under-slung load to the Island Hill load site ahead of each operation, and used to refuel helicopters during the operations. The tank trailers were kept topped up using flyable fuel tanks (1000 L each). One to two helicopters (in addition to helicopters required for sowing) were required to sling flyable fuel tanks to and from the load site throughout operational days, in order to maintain the supply of fuel.

Bait sowing

Sowing of the treatment area went as planned for both phases. Phase 1 involved 3-4 helicopters for sowing per operation, and Phase 2 required 7 helicopters for sowing.

The weather on Rakiura is unstable and unpredictable. Operational planning drew heavily on local knowledge of weather patterns from local staff and air users to navigate around low cloud and windy conditions.

Team & Operators

The complexity, isolation and profile of this operation required a large team on and off site for delivery. During the Pukunui toxin operations (21-22 August 2025), there were a total of 45 people present at the Island Hill load site, and 20 people in offsite/remote roles. This included helicopter pilots and ground crew, staff unboxing pods on the platform, vessel operators, security, technical and operational staff, and staff supporting logistics.

The success of this operation, in the face of significant technical and logistical challenges, is a direct result of the experience, hard work, mutual respect, and dedication of all involved: the operators, DOC staff, and ZIP staff.

This operation involved numerous "firsts", including:

- The first time many of the operators (helicopter, vessel, security, DOC, and ZIP) had worked together.
- The first operation of this size on Rakiura, and the first aerial operation on the island in decades.
- The first use of a gantry crane for island loading, and pods for storing 1080.

Cost of Operation

Undertaking aerial predator control on Rakiura at this scale was a completely new activity for DOC and ZIP. As such, there was considerable uncertainty in the initial budget forecast for the pukunui aerial operation. The original forecast for ZIP to deliver the pukunui operation was \$3.9M, with funding provided by DOC. Until the work got underway, and was able to be closely tracked throughout the project, it was unknown what impact the remoteness and associated logistics would have on the overall cost. The final cost of the pukunui predator control operation was \$4.315M, paid for by DOC funding.

The main factors that contributed to the higher than estimated cost were: complexity of getting bait and fuel onto the island; increased security requirements; and the large team involved in the operation and the costs of transporting them (all via helicopter) to/from the load site etc.

Monitoring and Detection

Monitoring of target species (feral cats, possums, and rats) and non-target species (white-tailed deer, kiwi) was conducted using trail cameras underneath the Pukunui Predator Control Operation. Monitoring focusing on rats was conducted underneath the Eradication Trial. See **Appendix 3** and **Appendix 4** for maps of monitoring design.

Monitoring looked for changes in abundance of target and non-target species under the treatment area compared to a non-treatment area.

Results

Feral cats, rats, and possums were monitored for fifteen weeks before, and six weeks after the Pukunui Predator Control Operation with a network of 135 trail cameras.

Rats were reduced to very low levels. This is in stark contrast to monitoring results from outside the operational area where 1080 bait was not applied and rat numbers have remained very high. By controlling rats, we were able to significantly reduce the primary target - feral cats - through secondary poisoning as they ate the poisoned rats.

There were no detections of feral cats on camera during the post-operational period, making it at least six weeks post operation without feral cats. This gives us confidence that pukunui have the best possible chance at a successful breeding season this year. However, it's only a matter of time before feral cats invade. At the time of this report, two feral cats have been caught in traps since the operation. One was about 500 metres from the operational boundary, and the other was about five kilometres inside.

Cameras will remain active to monitor the reinvasion and see how long it takes for feral cats to reach the Tin Range pukunui breeding grounds. This will help to inform future predator control efforts to protect pukunui, as well as future work by PFR.

Possum numbers were significantly reduced through the operation, with detections in two sites post operation, which is likely to be just two individuals.

Kiwi numbers have remained high, with no discernible change before or after the operation

The results from the Predator Free Rakiura Eradication Trial will be available soon.

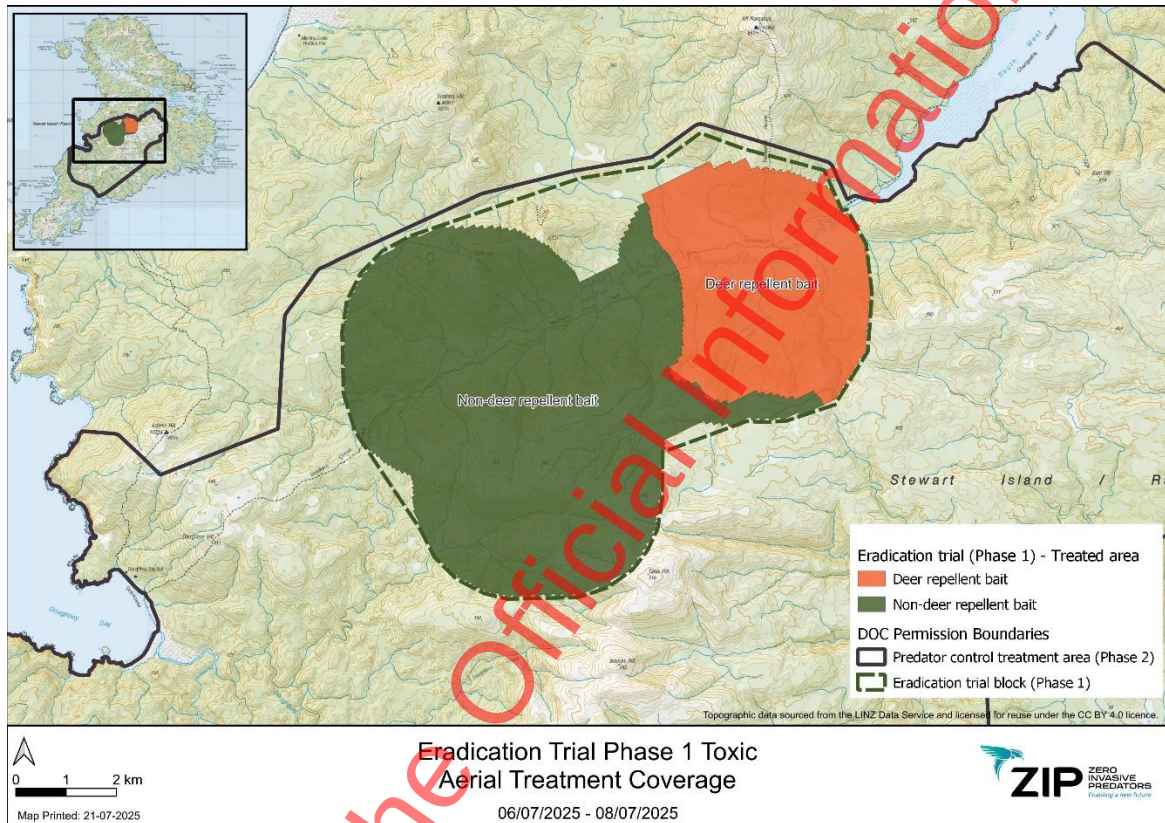
Latest Pukunui Breeding Numbers.

The project outcome from the Pukunui Predator Control Operation - *Reduce, halt, or reverse the population decline of Pukunui for the 2025/26 breeding season* - will be assessed after the annual pukunui flock counts in April 2026.

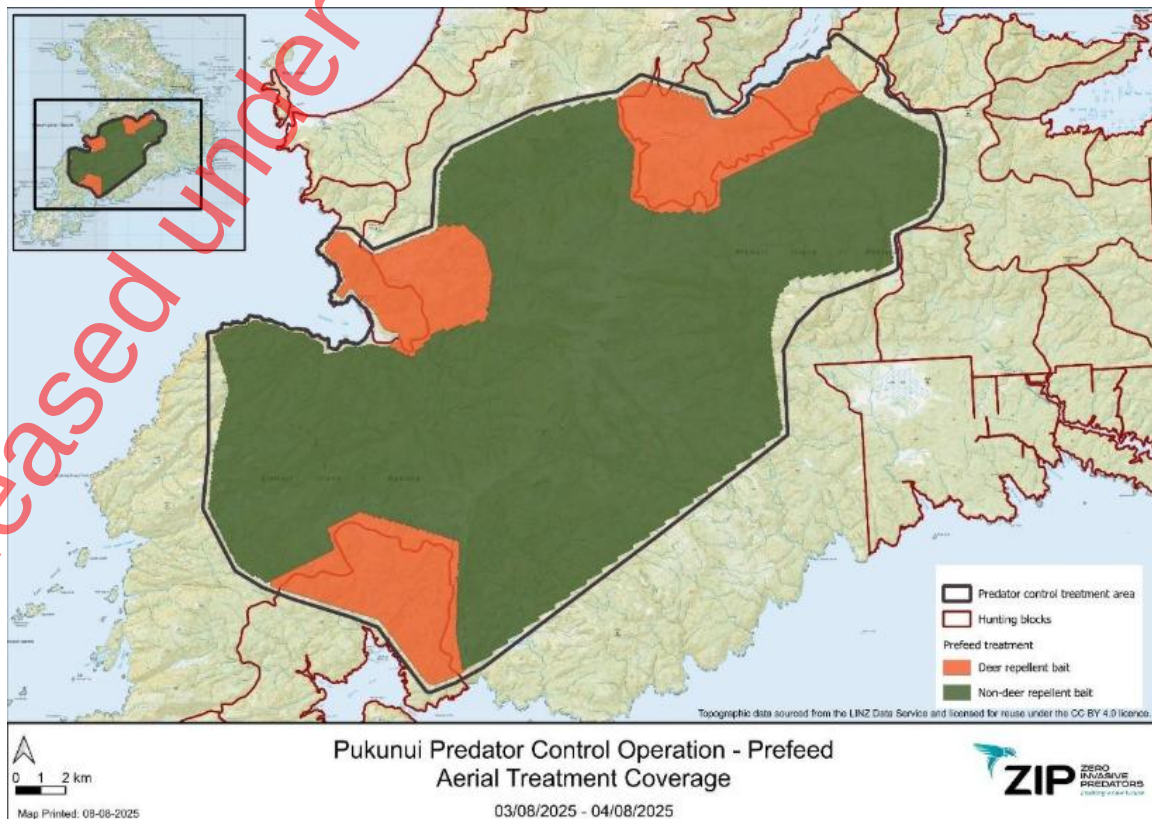
As of November 2025, breeding signs look promising. The Pukunui Recovery Team have found approximately 62 eggs (47 of which are in the operational area), 22 nests, and 12 chicks. Nest surveying will continue until the end of December.



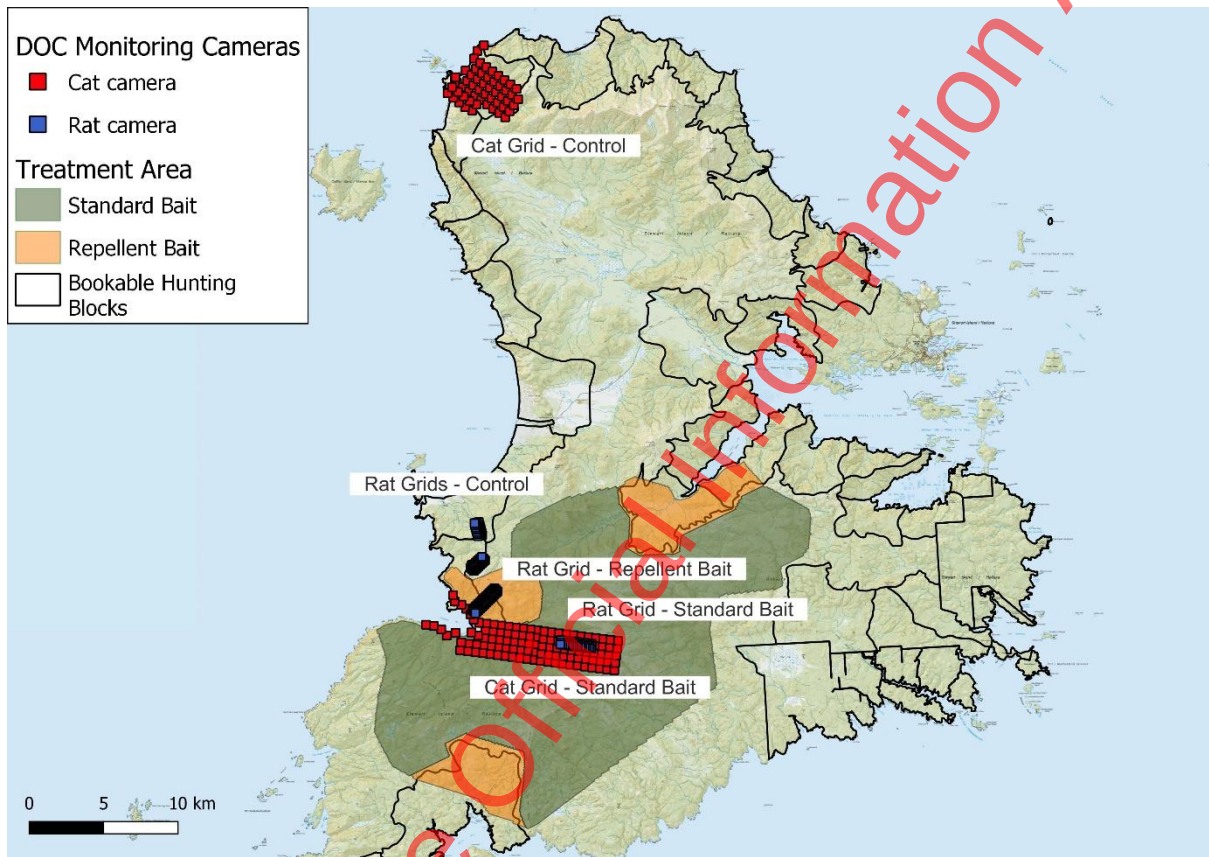
Appendices



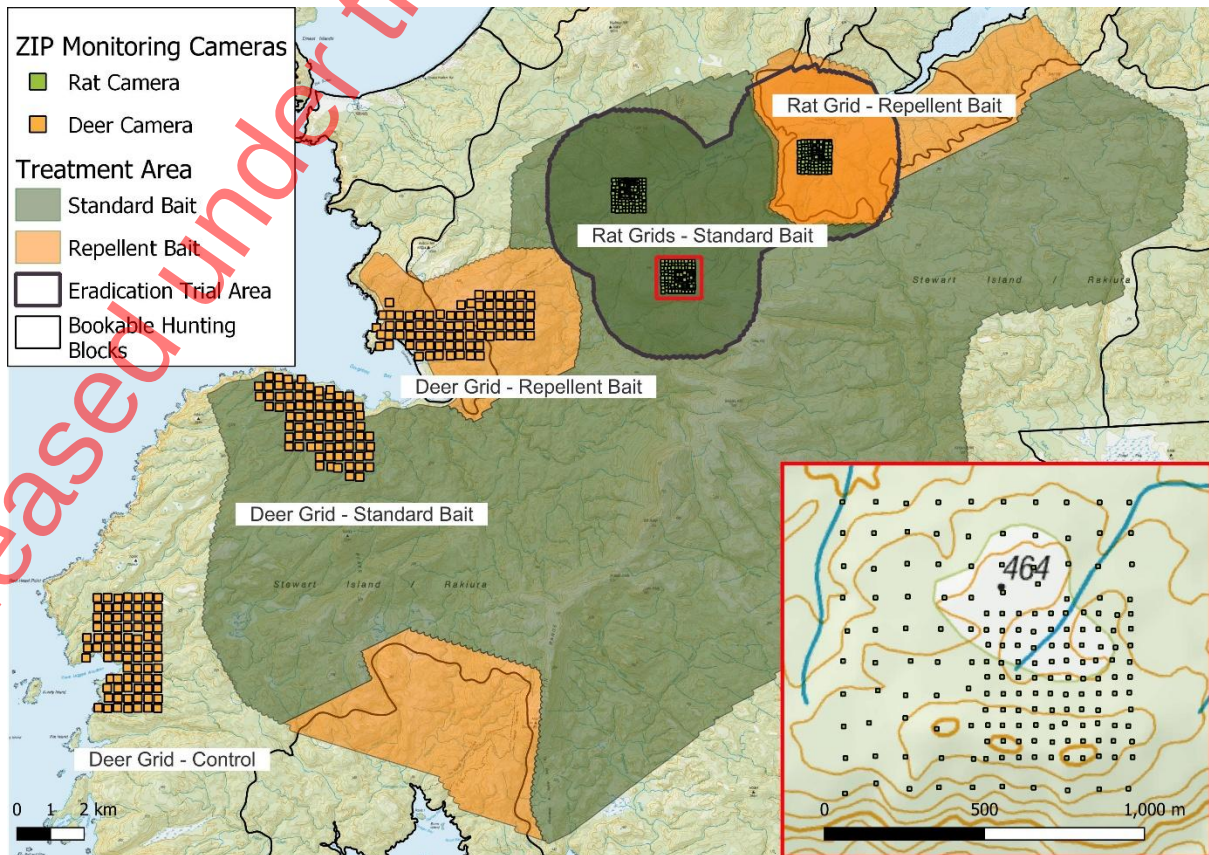
Appendix 1 Aerial Treatment Coverage for Eradication Trial Toxin



Appendix 2 Aerial Treatment Coverage for Pukunui Prefeed



Appendix 3 DOC monitoring grids for feral cats, possums, and rats underneath the Pukunui Predator Control Operation



Appendix 4 ZIP monitoring grids for rats and deer, underneath the Eradication Trial and Pukunui Predator Control Operation

Release of Milestone Payment PF Rakiura Feasibility Period ending September 2025

Project Details			
Project Name and Code	PF Rakiura Feasibility FMS ID: PJ-0000710	Amount of Milestone payment due	\$750,000.00
Recipient	Zero Invasive Predators	Total funding paid-to-date	\$3,750,000.00
Contract Manager	s9(2)(g)(ii)	Total approved funding	\$6,000,000.00
Quarterly Report	DOC-10548305	Funding Agreement	DOC-7770700
Start Date	02/04/2025	End date	31/12/2026
Project Summary	ZIP is to carry out two years of research, development and implementation work required to resolve the feasibility of Island-wide predator eradication, including a better understanding of future cost.		

PF2050 – Assessment & Endorsement of Recommendation to Release Milestone Payment

Review and Recommendation

PF2050 Programme Office Recommendation

I confirm the project is SLIGHTLY OFF TRACK for current financial and milestone achievement and IS TRACKING TOWARDS achieving its future milestones.

Overall milestone deliverables health Green

Financial health Red

Life to Date Financial position is Red

General Commentary and Recommendation:

The project is tracking at an overall status of Amber due to their milestone performance tracking at Green, and their financial health tracking at Red. The project has delivered all milestones due this quarter, however it has been noted that at least two quarters in Quarter 2 will be unable to be completed within the scoped timeframe. It is also worth noting that the scope of the Annual Plan

is currently in draft as ZIP is awaiting results from the Pukunui predator control operation to inform the ongoing programme of work, and any adjustments necessary.

Within the first quarter, ZIP achieved the completion of phase 2 of the Pukunui/ Southern NZ Dotterel predator control operation. This covered ~7,000ha within the ~43,000ha aerial operation to increase Pukunui's chance of survival. This predator control operation was used to test the 1080 to Zero approach employed by ZIP on all three rat species (ship, Norway, and kiore), across multiple habitats with and without deer repellent.

ZIP has reported that the camera-based trial to assess deer repellent efficacy with the white-tailed deer population on Rakiura was unable to determine a result. This is due to 90% of all bait being eaten by rats and possums before deer had a chance to encounter it. Of the 126 deer encounters with bait present, only 1 bait was consumed. A report from Manaaki Whenua has been published and is now publicly [available](#). Further results from the white-tailed monitoring through the Pukunui predator control operation are expected before the end of the year. The majority of cameras have been serviced, and the data is with Manaaki Whenua to review, analyse and report.

Looking forward, ZIP has noted that results from the 1080 to Zero trial on Rakiura for all three rat species are expected by the end of the year. Lab trials of 1080 on Norway rats and kiore will continue in order to generate "statistically robust sample sizes." s9(2)(b)(i)

As stated within the financial health and performance of this document, there is a discrepancy between the budget allocated for expenses in the Annual Plan v. the Quarterly Report by \$200k. As the Annual Plan is in draft, the figure for understanding the actual v. budget was taken from the Quarterly Report. The total underspend of the project is 14.8% (\$209,000) with a closing balance of \$2,422,000. The project has reported to spend \$1,320,000 in the next quarter, which brings a budgeted closing balance of \$1,202,000 (excluding the release of \$750,000 as a milestone payment). To understand the future forecast for each quarter, the Annual Plan will need to be updated.

I recommend that payment is (tick the appropriate box)

☒ APPROVED ☐ DEFERRED ☐ N/A (No payment this quarter)

s9(2)(
g)(ii)

9/12/2025

Investment and Reporting Lead, Predator Free 2050

Commentary:

To add to the above, the 1080 2 zero field trial results for the three rat species are being analysed with the first fact sheet from the first batch of data to be circulated soon. The data from the three deer repellent trial blocks is with IBS (MWLR) and analysis is underway.

I recommend the payment is (tick the appropriate box)

Relationship Lead

☒ **APPROVED** ☐ **DEFERRED** ☐ **N/A (No payment this quarter)**

s9(2)(g)(i)
i)

Senior Project Lead Predator Free 2050

Approval of Milestone Payment Release

I recommend the payment is (tick the appropriate box)

☒ **APPROVED** ☐ **DEFERRED** ☐ **N/A (No payment this quarter)**

I approve the milestone payment of \$750,000.00 (plus GST, if any) to be paid to the recipient.

Signed by:

Date: 10/12/2025

s9(2)(g)(ii)

Manager, Predator Free 2050

Te Papa Atawhai, Department of Conservation

Assessment of projects progress

Milestone Deliverables Reporting Control:

Milestone Deliverables Summary

All milestones due this Quarter have been completed. Quarter 2 milestones have been included as there has been indication of a delay with one of them, and an extension to another.

Milestone	Progress	Project Health Status (refer guidance table)	Commentary (ensure below guidance is addressed)
<u>Q1 & Q2: PFR Ltd Board Meetings</u>	Completed	Green	- This milestone occurs every quarter. - A PFR board meeting was held on 19 August with the next one planned for 21 November.
<u>Q1: Trial on how 1080 behaves in sea water complete (with decision made on next trial needed, if any).</u>	Completed	Green	- ZIP has completed the milestone on time and within scope of the draft Annual Plan provided to DOC. - Cawthron Institute with ZIP conducted a study to see what happens if a 1080 bait pellet falls into seawater. This consisted of two bait types to measure how fast the 9mg of 1080 in a 6g pellet of water diffuses: - o "Wet forest" (water resistant) - ~13 hours, full diffusion in ~72 hours - o "Dry forest" (breaks down quickly) - ~4 hours, full diffusion in ~24 hours - A decision has been made for another trial to occur. This consists of the development of a multi-weather scenario model to examine how ocean dynamics influence dilution and what this "indefinite dilution" means for risks to fisheries species. - Updates are consistently provided to Ministry for Primary Industries via a monthly meeting between ZIP, DOC and MPI.

s9(2)(b)(ii)

s9(2)(b)(ii)

s9(2)(b)(ii)

Q2: Iridium satellite gateway (in lieu of 4G coverage) released for production.	In Progress	Amber	- ZIP has indicated that this milestone is most likely to be achieved by end of Quarter 3. - Reasoning provided as that the most urgent use for an Iridium satellite gateway is required in the backcountry of the Predator Free South Westland project, where in places there is no line of sight to existing gateways for 4G coverage. - The 4g terrestrial network has provided better coverage than expected, and the AI camera network rollout is now prioritising front-country sites. As a result, this work has become less urgent. - With PF Rakiura, the priority of this development will depend on the upcoming operational programme, which will be informed by the results of the Pukunui predator control operation.
Q2: Efficacy of 1080 to Zero on all three rat species on Rakiura determined from eradication trial camera networks.	In Progress	Green	- ZIP has been monitoring a network of trail cameras for rat activity over two months before and post the Pukunui predator control operation. - Image "classification" is currently being carried out through a combination of AI-assisted filtering and manual review to differentiate between the three rat species. Results are expected by the end of November. - Preliminary post-operation findings have been shared with a small DOC management group. - Insights from the Pukunui predator control operation monitoring will inform future PF Rakiura operational planning.
Q2: Complete the risk pathway analysis in partnership with CEBRA	In Progress	Green	- CEBRA have completed their initial biosecurity risk pathway model, and are now in the process of further developing the model following an expert elicitation

			workshop and detection dog voluntary searches of luggage and freight. - CEBRA have recently asked to extend the project date to 30 April 2026, therefore a variation to their Agreement will be required.
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Assessment of Milestone Deliverables (above table) Commentary: For the purpose of this being the first formal quarterly report that has been received from ZIP, all milestones completed from Quarter 1 to date have been included as part of the Assurance. Please note that going forward, only milestones relevant to the quarter and are not completed or in progress will be stated. Overall status of the milestone deliverables is Green as they have completed all due this Quarter. It has been noted within the Milestone Deliverables Summary that there will be at least two milestones from Quarter 2 that will not be completed within the Quarter. This should however have no impact on the delivery of the project. It is also worth noting that the Annual Plan is still currently in draft as scope for what ZIP will be delivering this FY has changed e.g., eradication operation in Pegasus block unlikely to occur. DOC has indicated that we would like an updated Annual Plan prior to Christmas to outline the remainder of work for the FY.	Green
Is a variation to the agreement being considered? Commentary: A variation has not yet been considered, but as this is a 2-year Agreement and the first eradication operation has not yet commenced on Pegasus Block, this may result in an extension of the Agreement term.	No

Financial Reporting Control:

Life to date financial position	14.8% underspend
Assessment of overall financial health and performance of project Commentary: There is a discrepancy of the budget allocated for expenses in the Annual Plan v. Quarterly Report differs by \$200k. Considering the budget allocated within the Annual Plan, the project has an underspend of 0.7% (\$9,000). Considering the budget allocated within the Quarterly Report, there was an underspend of 14.8% (\$209,000). As this is the most recent figure and the Annual Plan is in draft, the budget figure used to calculate the underspend has been taken from the Quarterly Report. Note that there has not been a forecast provided for the next Quarter within the Report, but in the Annual Plan there is a figure of \$1,320,000 forecasted.	Red

Health and Safety/ Risks and Issues:

Are Health and Safety Systems working well, is a Health and Safety Plan in use and is Incident reporting occurring? <i>(Should reflect H&S Indicator in Enquire)</i> <i>Commentary:</i> ZIP has provided the following commentary regarding Health and Safety: “[H&S] responsibility sits with the PFR Limited and ZIP Boards. DOC’s SLO is privy to all H&S information (including safety plans, incident reporting, and management responses) and is part of these discussions at the Board meetings.” Direction has been received from the PF2050 Manager to enquire whether reporting received directly via the SLO rather than via the Agreement Manager of the Agreement will sufficiently satisfy DOC’s needs. It is however stated within the ZIP Partnership Agreement that as a part of their Quarterly Reporting obligations, this is to be reported to via the PF2050 Programme Office.	Green
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Project Workstream	Risk/ Issue	Actions required
A risks and issues register is held separate to the Assurance document that is reviewed quarterly by ZIP and DOC staff.		

Released under the Official Information Act

Instructions for completing this form

Purpose of the Release of Milestone Payment Form

To provide a standalone assessment of a project's current performance against its funding agreement to recommend the release, decline, or deferral of the next proposed payment. This form can also be used to trigger discussions about any project recovery plan actions that may be needed.

Funding Release Controls and Responsibilities

- Where a report is required but has not been received, no further funds will be released.
- The **Investment and Reporting Lead/ Contract Manager** is the first line in providing assurance that the project has performed well to date and is well positioned to receiving the next funding instalment. The first line should look at the variance of the work undertaken, and money spent against the planned outputs for that quarter.
- An appropriate and realistic recovery plan should reflect the size of the variance, and the scale and risk of the project. A plan can range from a two-line email to a detailed multiyear plan.
- Performance outside these limits (i.e. above 50% variance in milestone delivery) could result in a deferred payment and/or trigger a review and potential reset.

Milestone Assessment Form for non-payment periods

To provide a standalone assessment of a project's current performance against its funding agreement. This form can also be used to trigger discussions about any project recovery plan or actions that may be needed.

- An assessment of project performance towards milestones is still required following each quarterly report
- The Milestone assessment form provides an opportunity to assess performance and justify remedial action if necessary.

Guidance Notes to completing the form

- Complete table on title page - Add Milestone status from previous form...
- **Variance** is the percentage difference between actual and targeted outputs
- **Calculating the % variance** of underspend and milestone variance–

$$\frac{(\text{Total target \$ / milestone targets}) - (\text{Total actual \$ spent / milestones achieved})}{\text{Total target \$ / milestone targets}} \times 100$$

e.g. a project has received \$500,000 in total and has spent \$400,000, the total underspend is 20%.

Note: a negative value indicates an over achievement/spend

- **Overall milestones achievement Project Health Status** – This is a Project Health Status assessment of how the project is tracking to all milestones for the current reporting period. This should consider the Project Health Status indicators for each outcome listed in the Milestones table. Consider whether the project's most significant outcomes are on track and if the milestones rated Amber to Red are significant enough to affect the project's larger outcomes and objectives
- **Financial Project Health Assessments** – Select the Project Health Status that represents the financial indicator.

Project Health – Assigning Project Health Indicators	
Colour	Criteria description
GREEN	Successful delivery of all (or almost all) of the required deliverables. There are no major risks or outstanding issues that have prevented the achievement of the deliverables. Variance in delivery or financial performance should be less than 5%

AMBER	Successful delivery of most of the required deliverables. Minor or significant issues may have impacted delivery. These issues are mostly understood and being worked through. Variance in delivery or financial performance should be between 5% and 10%
RED	Most deliverables have not been met. Minor or significant issues have impacted delivery. These issues are not understood and are not being worked through. Variance in delivery or financial performance is over 10%

Released under the Official Information Act

Release of Milestone Payment Predator Free Rakiura Feasibility Period ending December 2025

Project Details			
Project Name	Predator Free Rakiura Feasibility FMS ID: [inserted automatically]	Amount of Milestone payment due	\$750,000.00
Recipient	Zero Invasive Predators Limited	Total funding paid-to-date	\$4,500,000.00
Contract Manager	s9(2)(g)(ii)	Total approved funding	\$6,000,000.00
Quarterly Report	DOC-10681526	Funding Agreement	DOC-7770700
Start Date	2/04/2025	End date	30/12/2026
Project Summary	For ZIP to carry out two years of research, development and implementation work required to resolve the feasibility of Island-wide predator eradication, including a better understanding of future cost.		

PF2050 – Assessment & Endorsement of Recommendation to Release Milestone Payment

Review and Recommendation

Investment and Reporting Lead Recommendation

I confirm the project is SLIGHTLY OFF TRACK for current financial and milestone achievement and HAS A REALISTIC RECOVERY PLAN TOWARDS achieving its future milestones.

Overall milestone deliverables health Red

Financial health Red

Life to Date Financial position is Red

General Commentary and Recommendation:

Overall, the project is currently performing at a Red status, with both their milestone performance and financial performance reporting to be Red. Despite the overall performance status, the project has reported the following:

- Images have been analysed from a network of 525 cameras across three intensive rat monitoring grids. Results indicate a substantial knockdown of rats, s9(2)(b)(ii)

s9(2)(b)(ii)

- Monitoring of deer through the pukunui operation (across deer repellent, non-repellent and non-baited blocks) has been completed, with data analysed by Manaaki Whenua. Results have now been released to the public.

As stated within the Milestone Deliverables Summary, 3/5 of the milestones were unable to be completed this quarter; two of which were signalled to be delayed previously. It has been raised with the Senior Project Lead for PFR and will be raised with the PF2050 Manager to sought out further information on when we should expect these milestones to be completed.

Looking forward, ZIP will:

- s9(2)(b)(ii)
- Work through further eradication options with DOC, and any necessary adjustments. However, based on the combination of rat survivorship detected post Pukunui Predator Control Operation and a predicted mast event, a decision has been made not to undertake a further large-scale aerial operation in 2026.

Noted in the assessment of the financial health of the project, the project has received \$4.5m across the term of the Agreement, with \$3m being released upon the condition of receiving a FY24/25 Annual Plan in FY24/25. The project had provided a budgeted spend of \$3m, however, there is no confirmation of the actual spend. An issue has been captured regarding the lack of financial transparency of the project.

From July 2025 to December 2026, the project has received \$1.5m of DOC funds but has received a total income (from other Funders) of \$2.5m. Of the income, the project has an underspend of 25.1% (surplus of \$627,000) of which ZIP has stated is due to the reduced operational expenses. Prior to the next quarterly report, a full project re-forecast is expected to be completed to understand future cost of the project till the end of term.

Noting the current full-year forecast, there is likely to be a closing balance of \$3.251m by the end of the FY. This is likely due to DOC having committed to funds via the Investment Agreement only till June 2026.

I recommend that payment is (tick the appropriate box)

☒ APPROVED ☐ DEFERRED ☐ N/A (No payment this quarter)

s9(2)
(g)(ii)

24/02/2026

Predator Free 2050 Investment and Reporting Lead

Point of Contact /
Subject Matter
Expert Endorsement

Commentary:

The project has some significant challenges to overcome following the results from the eradication trials. However, it is one of the largest most complex eradication projects undertaken and they are working on options to address some of these operational challenges. These are being done with DOC and input from other stakeholders.

These are discussions are ongoing in a series of scheduled weekly meetings, topic specific meetings/ workshops and calls. Due to the mast year, there is an opportunity to take the time to work through the options, as a risk is making a quick decision on the next operational/ trial steps.

I recommend the payment is (tick the appropriate box)

☒ **APPROVED** ☐ **DEFERRED** ☐ **N/A (No payment this quarter)**

s9(2)(g)(ii)

Senior Project Lead Predator Free 2050

Approval of Milestone Payment Release

I recommend the payment is (tick the appropriate box)

☒ **APPROVED** ☐ **DEFERRED** ☐ **N/A (No payment this quarter)**

I approve the milestone payment of \$750,000.00 (plus GST, if any) to be paid to the recipient.

The shift in workplan to address key barriers to eradication success is noted and is the right work to be doing.

Signed by:

Date: 27/02/2026

s9(2)(g)(ii
)

PF2050 Manager

Te Papa Atawhai, Department of Conservation

Released under the Official Information Act

Detailed project assessment

Milestone Deliverables Summary			
Milestone	Progress	Project Health Status (refer guidance table)	Commentary (ensure below guidance is addressed)
s9(2)(b)(ii)			
s9(2)(b)(ii)			

Iridium satellite gateway (in lieu of 4G coverage) released for production.	Not Completed	Red	- Milestone has not been completed as prototype testing of the consolidated gateway is underway in Predator Free South Westland, focusing on locations without line-of-sight to existing 4G gateways. - Further rollout within PF Rakiura will be determined by the revised operational programme, which will be informed by the results of the eradication trial and discussions with DOC and funders.
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Overall assessment of amber/red milestones (from above table) 5 Commentary: Due to a majority of the milestones (3/5) unable to be completed this quarter, the project is currently reporting at a Red performance. It had been noted in the last milestone assurance (DOC-10560030), that two of the milestones would be delayed however, no commentary has been provided on when they expect to achieve the delayed milestones. Issues of narration will be escalated to the PF2050 Manager to discuss with ZIP.	Red
Is a variation to the agreement being considered? Commentary: A variation to the term is likely to occur as the project will need to revise the operational programme, which will be informed by the results of the eradication trial and discussions with DOC.	Yes

Financial Reporting Control:

Life to date financial position	25.1% underspend
Assessment of overall financial health and performance of project Commentary: To date, the project has received \$4.5m across the term of the Agreement, with \$3m being allocated to the project within this Financial Year. As no report was received upon the end of FY24/25, but an Annual Plan covering a funding schedule, the project will be assessed based off funding received this FY v. spend this FY. Note that the lack of financial transparency has been noticed in the Risks and Issues section of this Milestone Assurance form. To date from FY25/26, the project has received \$1.5m of DOC funds but has received a total income from other funders of \$2,500,000. Of the income, the project has spent 74.9% of funds received with a surplus of \$627,000 (25.1% underspend). The project has noted that this is due to a reduced operational spend due to deferring the first elimination operation in light of the rat results and upcoming mast.	Red

Health and Safety:

Are Health and Safety Systems working well, is a Health and Safety Plan in use and is Incident reporting occurring? (Should reflect H&S Indicator in Enquire)	Green
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Commentary: “[H&S] responsibility sits with the PFR Limited and ZIP Boards. DOC’s SLO is privy to all H&S information (including safety plans, incident reporting, and management responses) and is part of these discussions at the Board meetings.”

Direction has been received from the PF2050 Manager to enquire whether reporting received directly via the SLO rather than via the Agreement Manager of the Agreement will sufficiently satisfy DOC’s needs. It is however stated within the ZIP Partnership Agreement that as a part of their Quarterly Reporting obligations, this is to be reported to via the PF2050 Programme Office.

Risks and Issues

Raised by	Risk/ Issue	Actions required
Investment Advisor	Lack of Financial Transparency	At the end of the year, it is requested that ZIP provides a complete financial summary/ report on life-to-date funding received v. life-to-date spend of DOC funds.

Guidance for completing this form

Funding Release Controls and Responsibilities

- Where a report is required but has not been received, no further funds will be released.
- The **Investment and Reporting Lead** is the first line in providing assurance that the project has performed well to date and is well positioned to receiving the next funding instalment. The first line should consider variance to the work undertaken, and money spent against the planned outputs for that quarter.
- An appropriate and realistic recovery plan should reflect the size of the variance, and the scale and risk of the project. A plan can range from a two-line email to a detailed multiyear plan.
- Performance outside these limits (i.e. above 50% variance in milestone delivery) could result in a deferred payment and/or trigger a review and potential reset.
- Approval of funding release is the responsibility of the Programme Manager.

Use of Milestone Assurance form for non-payment periods

To provide a standalone assessment of a project's current performance against its funding agreement. This form can also be used to trigger discussions about any project recovery plan or actions that may be needed.

- An assessment of project performance towards milestones is still required following each quarterly report
- The Milestone assessment form provides an opportunity to assess performance and justify remedial action if necessary.

Variance

- **Variance** is the percentage difference between actual and targeted outputs
- **Calculating the % variance** of underspend and milestone variance–

$$\frac{(\text{Total target \$ / milestone targets}) - (\text{Total actual \$ spent / milestones achieved})}{\text{Total target \$ / milestone targets}} \times 100$$

e.g. a project has received \$500,000 in total and has spent \$400,000, the total underspend is 20%.

Note: a negative value indicates an over achievement/spend

Project Health

- **Overall milestones achievement Project Health Status** – This is a Project Health Status assessment of how the project is tracking to all milestones for the current reporting period. This should consider the Project Health Status indicators for each outcome listed in the Milestones table. Consider whether the project's most significant outcomes are on track and if the milestones rated Amber to Red are significant enough to affect the project's larger outcomes and objectives
- **Financial Project Health Assessments** – Select the Project Health Status that represents the financial indicator.

Project Health – Assigning Project Health Indicators	
Colour	Criteria description
GREEN	Successful delivery of all (or almost all) of the required deliverables. There are no major risks or outstanding issues that have prevented the achievement of the deliverables. Variance in delivery or financial performance should be less than 5%
AMBER	Successful delivery of most of the required deliverables. Minor or significant issues may have impacted delivery. These issues are mostly understood and being

	worked through. Variance in delivery or financial performance should be between 5% and 10%
RED	Most deliverables have not been met. Minor or significant Issues have impacted delivery. These issues are not understood and are not being worked through. Variance in delivery or financial performance is over 10%

Released under the Official Information Act

Release of Milestone Payment

Predator Free Rakiura Feasibility

Period ending March 2026

Project Details			
Project Name	Predator Free Rakiura Feasibility FMS ID: PJ-0000710	Amount of Milestone payment due	\$750,000.00
Recipient	Zero Invasive Predators Limited	Total Agreement funding paid-to-date	\$5,520,000.00
Contract Manager	s9(2)(g)(ii)	Total approved Agreement funding	\$6,000,000.00
Quarterly Report	DOC-10940877	Funding Agreement	DOC-7770700
Start Date	2/04/2025	End date	30/12/2026
Project Summary	For ZIP to carry out two years of research, development and implementation work required to resolve the feasibility of Island-wide predator eradication, including a better understanding of future cost.		

Assessment & Endorsement of Recommendation to Release Milestone Payment

Review and Recommendation

Senior Investment
and Reporting
Advisor
Recommendation

I confirm the project is SLIGHTLY OFF TRACK for current financial and milestone achievement and HAS A REALISTIC RECOVERY PLAN TOWARDS achieving its future milestones.

Overall milestone deliverables health Amber

Financial health Red

General Commentary and Recommendation:

The project continues to progress at an overall project status of Amber, with activity focused on resolving key uncertainties to inform future eradication options.

The milestone delivery is assessed as Amber, despite multiple milestones remaining delayed and rated red. Delivery continues to be impacted by dependencies on research, site selection and regulatory approvals, s9(2)(b)(ii)

These delays have been previously signalled and reflect known dependencies, however, the absence of clearly defined forward timelines reduces confidence in delivery planning. It is recommended that future reporting includes indicative target timeframes for delayed milestones, including assumptions and dependencies to support forward assurance funding decisions.

The financial performance of the project is assessed as Red, with a life-to-date underspend of \$538,000 (16.6%) against total funding received of \$3,250,000, including \$2,250,000 of DOC funding and approximately \$1,000,000 in co-funding. This reflects deferred activity and funding timing, rather than financial management. The project maintains a positive cash position, with sufficient cashflow to support delivery. On this basis, while immediate funding is not required to sustain operations, release of the milestone payment is recommended to support continued progression of critical feasibility work and maintain delivery momentum in line with the agreed programme of work.

I recommend that payment is (tick the appropriate box)

☒ APPROVED ☐ DEFERRED ☐ N/A (No payment this quarter)

s9(2)
(g)(ii)

20/05/2026

Senior Investment and Reporting Advisor

Point of Contact /
Subject Matter
Expert Endorsement

Commentary:

The project continues progressing workstreams such as engagement and biosecurity while developing options for future trials based off the results of the field trials last year for the efficacy of 1080 for the three rat species and effectiveness of deer repellent baits aimed to reduce impact on white tailed deer.

Workshops with technical experts from both DOC and ZIP have been held to work through options and gaps identified from the trial work. This work will help inform the future delivery of the project.

I recommend the payment is (tick the appropriate box)

☒ APPROVED ☐ DEFERRED ☐ N/A (No payment this quarter)

s9(2)(g)(ii)

4/05/2026

Strategic Project Lead, Biodiversity National Programmes - Strategic Projects

Approval of Milestone Payment Release

I recommend the payment is *(tick the appropriate box)*

☒ APPROVED ☐ DEFERRED ☐ N/A (No payment this quarter)

I approve the milestone payment of \$750,000.00 (plus GST, if any) to be paid to the recipient.

Signed by:

Date: 22/05/2026

s9(2)(g)(ii)

Strategic Projects Manager, Biodiversity National Programmes
Te Papa Atawhai, Department of Conservation

Detailed project assessment

Milestone Deliverables Summary

Milestone	Progress	Project Health Status (refer guidance table)	Commentary (ensure below guidance is addressed)
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Developing New Knowledge and Technologies

s9(2)(b)(ii)

s9(2)(b)(ii)

<u>Quarter 2:</u> Iridium satellite gateway (in lieu of 4G coverage) released for production.	In Progress	Red	There has been no change in commentary provided in the March Quarterly Report from ZIP compared to the December Quarterly Report. The commentary reaffirms that this is still a priority for ZIP despite the timeline shifting, although it should be discussed as to when this will be moved to. There is no further update on the progress of this milestone.
<u>Quarter 3:</u> First AI algorithm for Norway rats and kiore completed.	Not Completed	Amber	This milestone has been deprioritised due to the delay in operational activity. Timing for this work will be determined by the revised operational programme, which will be informed by the results of the eradication trial and discussions with DOC and co-funders.

Overall assessment of amber/red milestones (from above table) Commentary: The overall assessment of milestone deliverables is Amber. While multiple milestones remain delayed and several are rated Red individually, the causes of delay are well understood, documented, and are being managed.	Amber
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Schedule slippage is evident across several milestones, driven by known research, logistical, and regulatory dependencies. In some cases, milestones have been deliberately deprioritised pending strategic decisions. There is moderate confidence that future milestones will be achieved. Confidence is supported by evidenced progress in critical areas s9(2)(b)(ii)	
Is a variation to the agreement being considered?	No

Financial Reporting Control:

Life to date financial position	16.6% underspend
Assessment of overall financial health and performance of project Commentary: The project's overall financial health is assessed as Red, life-to-date funding received totals \$3,250,000, comprising of \$2,250,000 of DOC funding, and approximately \$1,000,000 in co-funding contributions. Life-to-date actual expenditure totals \$2,712,000, resulting in a 16.6% underspend (surplus of \$538,000). The surplus is primarily attributable to deferred operational activity, the timing and phasing of funding, rather than financial management. Expenditure is tracking slightly below forecast and the full-year forecast remains within the approved budget. The project maintains a positive closing balance, indicating sufficient cashflow to continue planned work. The current financial position and management support future milestones to be achieved, noting that delivery risk is driven more by research, regulatory and site-selection dependencies rather than by funding availability. Spending remains broadly aligned with the level of activity delivered to date, particularly given the deferral of large-scale operational work.	Red

Health and Safety:

Are Health and Safety Systems working well, is a Health and Safety Plan in use and is Incident reporting occurring? (Should reflect H&S Indicator in Enquire) Commentary: "[H&S] responsibility sits with the PFR Limited and ZIP Boards. DOC's SLO is privy to all H&S information (including safety plans, incident reporting, and management responses) and is part of these discussions at the Board meetings." Direction has been received from the Strategic Projects Manager to enquire whether reporting received directly via the SLO rather than via the Agreement Manager of the Agreement will sufficiently satisfy DOC's needs. It is however stated within the ZIP	Green
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Partnership Agreement that as a part of their Quarterly Reporting obligations, this is to be reported to via the PF2050 Programme Office. “

Risks and Issues

Raised by	Risk/ Issue	Actions required
Project	s9(2)(b)(ii)	
Senior Investment and Reporting Advisor	Further delays to milestones due to dependency on research outcomes and sequencing constraints.	Reconfirm critical milestones and dependencies to delivery of feasibility. Request that future reporting includes indicative target timeframes for delayed milestones, including assumptions and dependencies to support forward assurance funding decisions.

Guidance for completing this form

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