



# Kauri Protection Programme Update

July 2023 - June 2024



**Biosecurity New Zealand**  
Ministry for Primary Industries  
Manatū Ahu Matua



## The National Pest Management Plan

The National PA Pest Management Plan was created for the protection of Kauri from the *Phytophthora Agathidicida* (PA) pathogen under the Biosecurity Act 1993. The objectives of the plan are to:

- (a) reduce the spread of PA;
- (b) maintain areas free of PA;
- (c) reduce the impact of PA within infected sites;
- (d) locally eliminate PA within infected sites;
- (e) protect Kauri with special value from PA; and
- (f) facilitate controlled access to Kauri forests where it does not compromise the future or protection of Kauri.

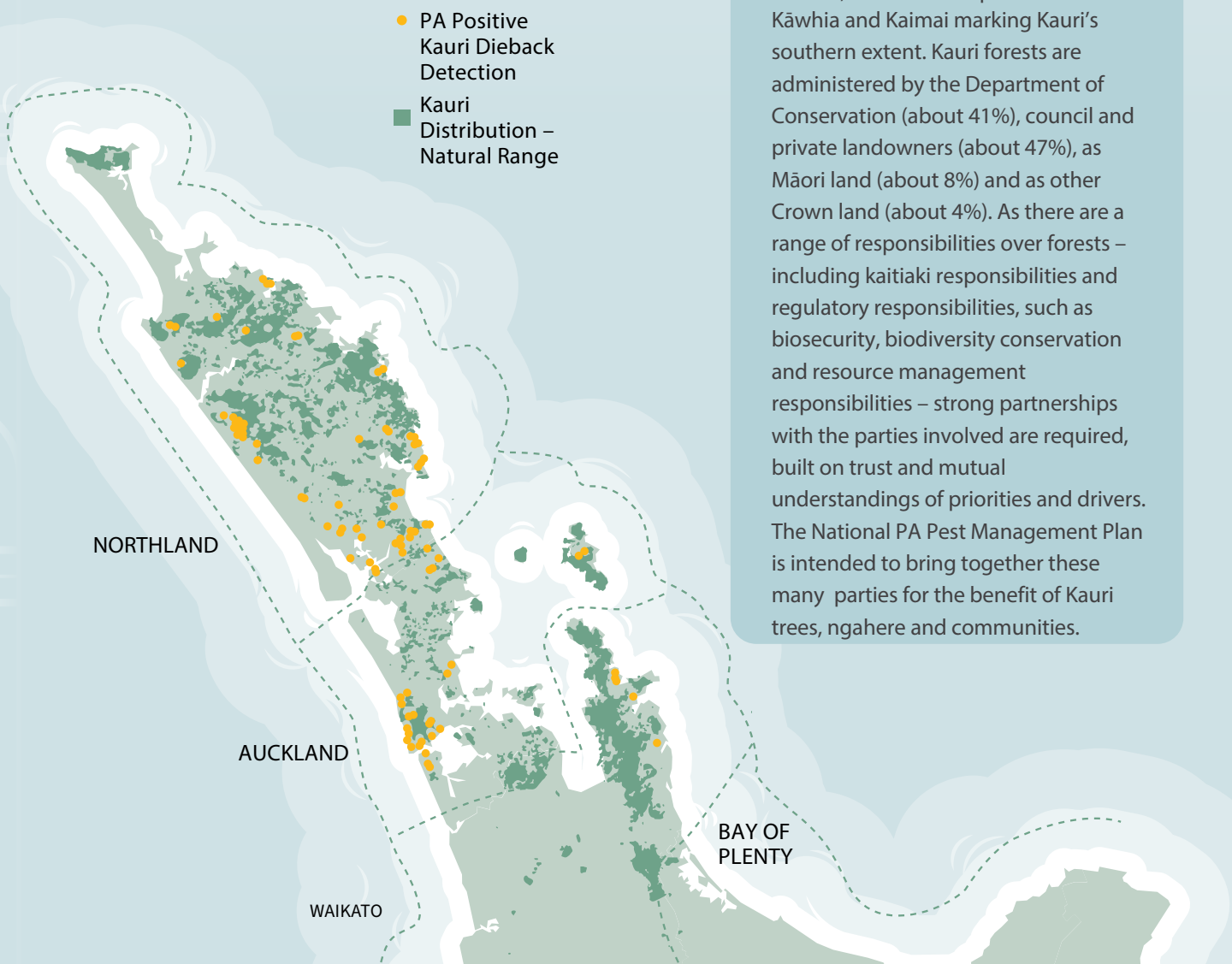
Tiakina Kauri, within Biosecurity New Zealand, is the management agency for the National PA Pest Management Plan. The principal measures by which Tiakina Kauri will achieve these objectives are listed in Clause 9 of the regulation. These are diverse, acknowledging the diversity of forests, communities and risk factors.

These include growing awareness and partnership, applying mātauranga Māori, increasing our knowledge of the location of trees and of the PA pathogen (including change over time), excluding stock and other animals from forests, managing forest access, upgrading tracks, performing hygiene protocols, and applying treatments to trees.

The 10 rules within the NPMP support these actions, with a focus on encouraging behaviours such as cleaning any items that could have come into contact with the forest floor and undertaking spread mitigations during earthworks near Kauri and when growing Kauri. As the PA pathogen infects Kauri through their roots, we need to be especially careful to avoid the root zone “hygiene zone” or “hygiene area”, wherever possible – including mitigating roads and tracks that run through this area.

### Partnership

Kauri naturally grow in northern New Zealand, above the 38<sup>th</sup> parallel – with Kāwhia and Kaimai marking Kauri’s southern extent. Kauri forests are administered by the Department of Conservation (about 41%), council and private landowners (about 47%), as Māori land (about 8%) and as other Crown land (about 4%). As there are a range of responsibilities over forests – including kaitiaki responsibilities and regulatory responsibilities, such as biosecurity, biodiversity conservation and resource management responsibilities – strong partnerships with the parties involved are required, built on trust and mutual understandings of priorities and drivers. The National PA Pest Management Plan is intended to bring together these many parties for the benefit of Kauri trees, ngahere and communities.



# Kauri protection programme at a glance

The National PA Pest Management Plan Measures include:<sup>1</sup>  
the management agency's level of understanding of the distribution of PA across Kauri lands and Kauri forests:



**227,165 ha**  
of **aerial surveillance** undertaken

**14**

Kauri forests with active **ground surveillance** programmes

the management agency's available access to capability, knowledge, and tools to support effective management of PA:

**24**

**kaimahi certified**  
to conduct ground  
surveillance

**4**

**PhDs**  
supported



**26**

**mana whenua**  
organisations working  
in their ngahere

**17**

kaimahi completed  
**GIS training**

**5**

**research**  
**projects**  
supported



**1**

**rongoā facility** built

the number of physical PA spread mitigations:

Over **2,547**  
**wild animals** vectors  
managed

**20**

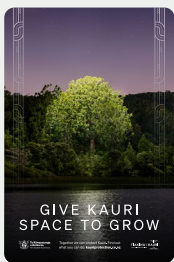
**hygiene stations**  
installed



**40,172 m**

**fencing installed** to  
exclude stock

the level of public and industry engagement in the management of PA:



Over  
**1.8 million**  
**people reached**  
with the national campaign

**25**

**track**  
**ambassadors**  
**operating** on key  
public tracks



**79%**

of New Zealanders  
believe they have a **role**  
**to play** in stopping PA  
spread

<sup>1</sup> In future, we will have more information available on the level of compliance with the requirements of the Plan. The final measure, the level of resilience of Kauri in response to PA, is long-term goal and can only be understood over decades or more.

# Programme Highlights FY 23-24

## National awareness and support for Kauri protection

A second Tiakina Kauri 'Give Kauri Space to Grow' campaign was run in Summer 2023/24, raising awareness of the National Plan and fostering care and reverence for Kauri to support behaviours that protect Kauri. The campaign was received very positively and reached 1.7 million people.

A survey was conducted in 2024, sampling over 1,800 New Zealanders. This found strong support for Kauri Protection – with 90% stating that they think it's important to protect Kauri and 79% believing we all have a role to play in stopping PA spread.



Image: Tamariki admiring a Kauri forest

## Risk-based planning and surveillance

Techniques for mapping risks within Kauri forests have been honed, in collaboration with regional councils, DOC, mana whenua, Manaaki Whenua and LINZ. Forest risk "heat" maps visually displaying factors that increase the likelihood of PA presence and spread – such as tracks, traplines, historic forestry and the movement of water.

When mapped and weighted, these factors inform surveillance plans allowing us to more efficiently find the pathogen, when it is present, and to determine PA-free catchments, where it is absent. This information informs surveillance and risk mitigation planning and prioritisation.

Risk-based surveillance plans are being delivered by trained mana whenua groups throughout Kauri lands, with 24 individuals being certified in ground surveillance methodology through Tiakina Kauri's capability building work programme. These efforts work in tandem with Auckland Council and Department of Conservation driven programmes, which also centre a partnership to approach to surveillance.

## Protecting Kauri while allowing for safe access to forests

Last financial year Tiakina Kauri supported Northland, Bay of Plenty and Waikato Regional Councils to upgrade their track infrastructure, including upgrading 2,127m of track and installing 16 new hygiene stations at Kauri forest track entrances.

Hygiene stations provide a means for visitors to clean dirt from their shoes and other items that touch the ground before entering and exiting a forest – reducing the risk that their activity will spread PA. Use of these stations is required by the National Plan.

New signage designs and guidelines have also been developed by Tiakina Kauri, in consultation with members of the Kauri Protection programme. The new designs reflect the 'Kauri Ora' direction of the programme, incorporate the National Plan rules, and meet the needs of landowners and kaitiaki by including the ability to customise key content.



Image: A Sapphire Springs Hygiene Station

### Removal of animal vectors from Kauri forests

Hooved animals have the ability to spread PA as they move within Kauri forests. Reducing wild animal populations, and fencing off areas of forest to keep them out, are priority actions for the Kauri Protection Programme.

Over the last financial year, Tiakina Kauri has supported the eradication of a wild cattle population on private property in Kennedy Bay, a Kauri forest area with a rich history, pā and wāhi tapu sites. A 2km fence has been built around the forested area to prevent the population from re-establishing.



*Image: A Fencing build in Kennedy Bay to exclude wild animals*

Regional councils throughout Kauri lands have also been supported by Tiakina Kauri to engage land owners and build exclusion fencing, building over 13km of fencing between July 2023 and June 2024.

### Treating Kauri trees

While there is no proven cure for PA-caused disease, there are treatment options that can be administered to individual trees.

Over the last National Operational Term research into phosphite dosage rates for larger trees was supported, along with a 10-year assessment of phosphite trials was concluded last financial year<sup>1</sup>. This assessment found overwhelming evidence for the efficacy of phosphite injection for the treatment and control of PA infection in Kauri. The report found treatment resulted in lesion healing, cessation of tree decline, and

eventual canopy recovery – providing confidence that phosphite injection is a useful tool for the management of PA pathogen infection.

Tiakina Kauri is also supporting two kaupapa focused on Kauri ora (health) led by knowledge holders and practitioners, guided by Mātauranga Māori. One sharing knowledge on Kauri ora through the facilitation of wānanga, with 22 held last financial year, the other through the application of rongoā onto approximately 98 rākau rangatira (Kauri) and monitoring the effectiveness of these treatments. Central to this work is the Mātauranga Māori associated with the extracting and producing rongoā, which acknowledges the close relationship and connection between the atua Tāne Mahuta and Tangaroa.

### Development and piloting of new diagnostic testing techniques

Over the last National Operational Plan term, promising DNA-based detection techniques and methods were developed, that could also greatly improve our understanding of PA distribution.

Tiakina Kauri supported research, conducted by Victoria University of Wellington, has seen the development of a faster, more sensitive, less environmentally disruptive and more portable test diagnostic test for PA – with its findings currently under peer review. A pilot is being run over this summer with the Kauri Ora Team of Te Roroato to further validate and operationalise the method.



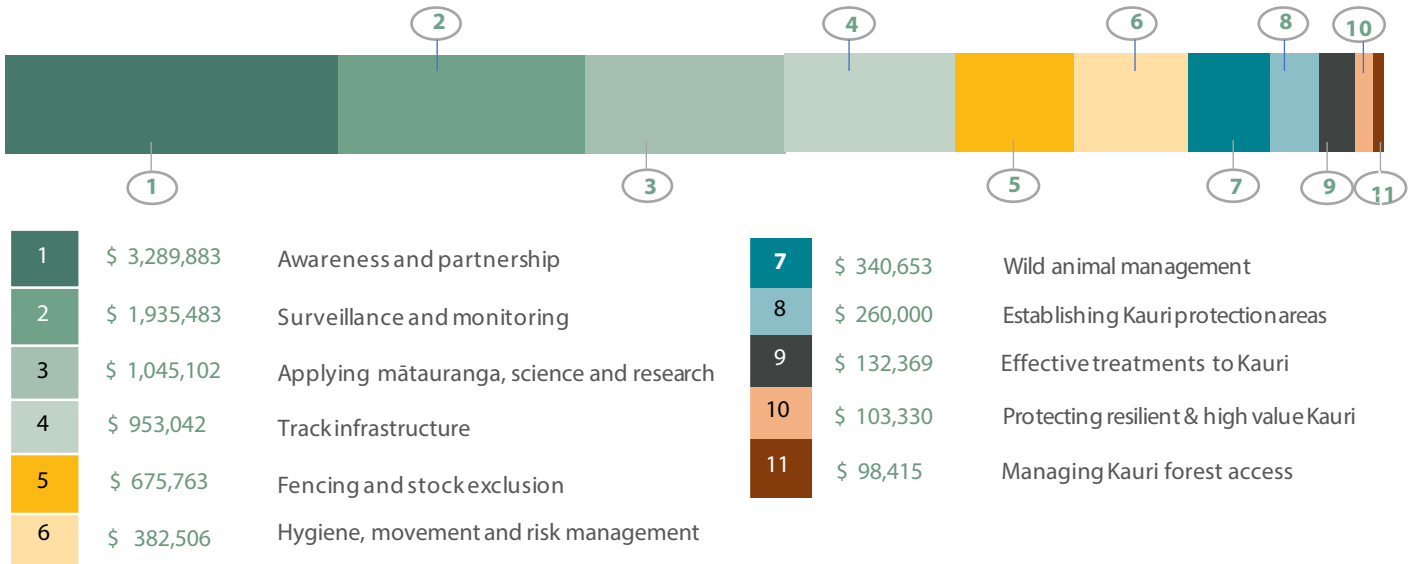
*Image: Taoho (Te Roroa) and Jade (Victoria University of Wellington) processing PA samples*

<sup>1</sup> <https://www.kauriprotection.co.nz/research/research-database/phosphite-trials-for-control-of-phytophthora-agathidicida-in-kauri-re-evaluation-after-10-years/>

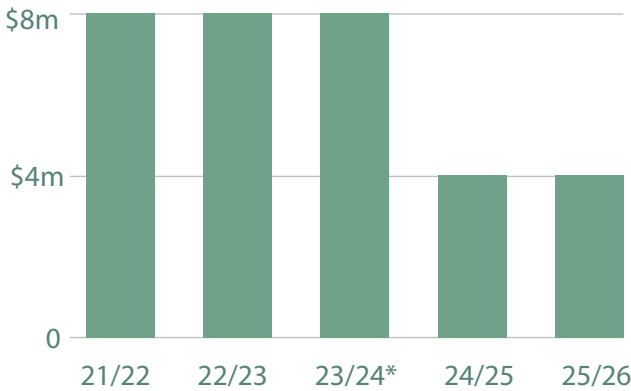
# Distribution of funding - FY 23/24

The principal measures of the NPMP provide the primary activities that will be carried out for the purpose of achieving the objectives of the plan and can be found in Section 9 of the National PA Pest Management Plan Order in Council. The distribution of funding across these activities can be found in below

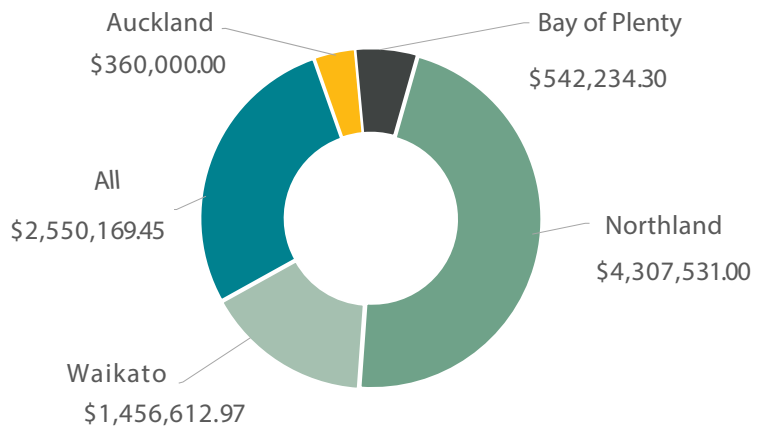
## Investment by principal measurement



## Funding level over time

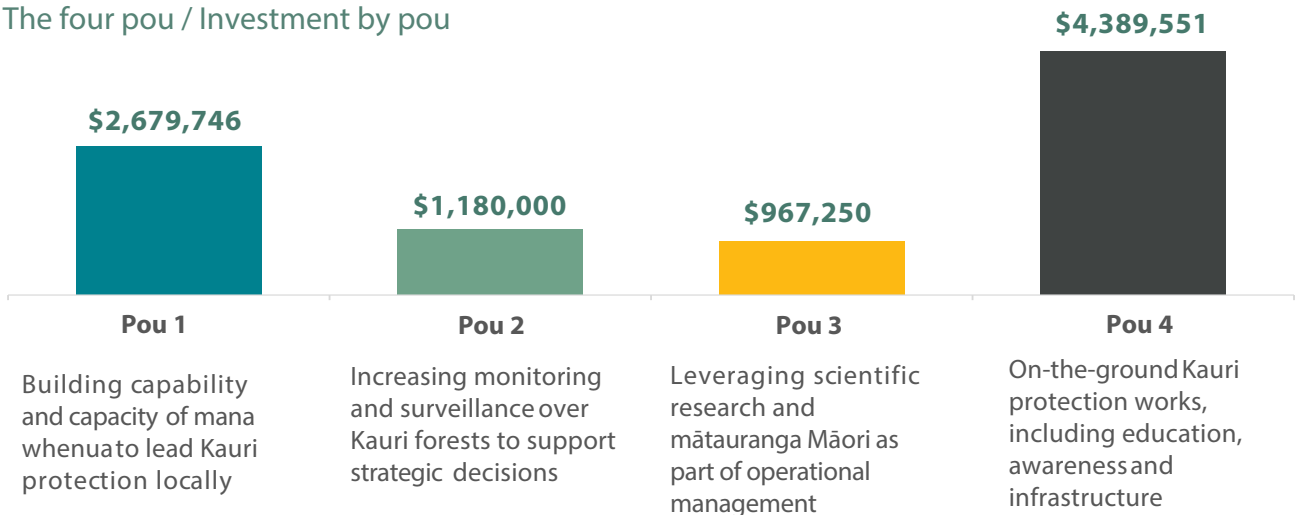


## Location of Investment













\*An In-Principal Expense Transfer of \$1.2M was also expended, from an underspend in FY 22/23






























## The four pou / Investment by pou



# Investments initiated between July 2023 – June 2024

## Key

|   |   |   |   |
|---|---|---|---|
|  | Awareness and partnership                 |  | Wild animal management                  |
|  | Surveillance and monitoring               |  | Establishing Kauri protection areas     |
|  | Applying mātauranga, science and research |  | Effective treatments to Kauri           |
|  | Track infrastructure                      |  | Protecting resilient & high value Kauri |
|  | Fencing and stock exclusion               |  | Managing Kauri forest access            |
|  | Hygiene, movement and risk management     |   |   |

| Pou                    | Organisation                            | Value   | PM  | Region    |
|------------------------|---|---|---|-----------|
| 1                      | Auckland Council (Ngati te Ata )        | \$50,000.00   |   | Auckland  |
|                        | Environs Holdings Limited(Te Uri o Hau) | \$31,741.00   |  | Northland |
|                        | Hako Tupuna Trust                       | \$50,000.00   |  | Waikato   |
|                        | Kauri Ora (via Te Roroa)                | \$14,822.17   |  | Northland |
|                        | Lincoln University                      | \$50,000.00   |  | All       |
|                        | Ngati Hei                               | \$50,000.00   |  | Waikato   |
|                        | Ngāti Kuri Trust Board                  | \$52,021.68   |  | Northland |
|                        | Ngati Maru ki Hauraki                   | \$50,000.00   |  | Waikato   |
|                        | Ngati Tumutumu Trust                    | \$350,216.00  |  | Waikato   |
|                        | Northland Regional Council              | \$850,000.00  |  | Northland |
|                        | Te Amohia Taiao Charitable Trust        | \$70,000.00   |  | Northland |
|                        | Te Ara Hou, Kennedy Bay Limited         | \$165,926.97  |  | Waikato   |
|                        | Te Kauri Tohora (Mangamuka)             | \$10,000.00   |  | Northland |
|                        | Te Kawerau Iwi Tiaki Trust              | \$260,000.00  |  | Auckland  |
|                        | Te Nehenehenui Trust                    | \$50,000.00   |  | Waikato   |
|                        | Te Rawhiti 3B2 Ahu Whenua Trust         | \$200,400.00  |  | Northland |
|                        | Te Runanga A Iwi O Ngapuhi              | \$88,192.00   |  | Northland |
|                        | Te Rūnanga O Te Rarawa Ltd              | \$138,860.36  |  | Northland |
|                        | Waahi Whaanui Trust                     | \$50,000.00   |  | Waikato   |
|                        | Whangaroa Papa Hapū                     | \$79,292.00   |  | Northland |
| Whirinaki Toiora Trust | \$18,274.18                             |  | Northland   |           |
| 2                      | Manaaki Whenua Landcare Reserach        | \$68,000.00   |  | Northland |
|                        | Te Rūngnga Ā Iwi Ō Ngāpuhi              | \$120,000.00  |  | Northland |
|                        | S A consultants Limited                 | \$97,000.00   |  | Northland |
|                        | Whangaroa Papa Hapu                     | \$80,000.00   |  | Northland |
|                        | BioSense Ltd                            | \$300,000.00  |  | All       |
|                        | Landcare Research New Zealand limited   | \$185,000.00  |  | All       |
|                        | Auckland Council - Jane Meiforth        | \$65,000.00   |  | All       |
|                        | LINZ                                    | \$265,000.00  |  | All       |

|   |   |              |  |               |
|---|---|--------------|--|---------------|
| 3 | University of Canterbury                                | \$52,500.00  |  | All           |
|   | Victoria University of Wellington                       | \$12,000.00  |  | All           |
|   | Scion (New Zealand Forest Research Institute Ltd)       | \$312,532.00 |  | All           |
|   | Auckland Council  | \$91,218.00  |  | All           |
|   | Plant & Food Research                                   | \$100,000.00 |  | All           |
|   | Ngatiwai Trust Board                                    | \$179,000.00 |  | All           |
|   | The Research Trust of Victoria University of Wellington | \$28,500.00  |  | All           |
|   | Ngati Hine  | \$191,500.00 |  | Northland     |
| 4 | QEI National Trust                                      | \$150,000.00 |  | Northland     |
|   | DOC   | \$240,000.00 |  |               |
|   | Guardians of the Bay of Islands Incorporated            | \$111,973.30 |  | Northland     |
|   | Native Forest Restoration Trust                         | \$161,247.32 |  | Northland     |
|   | Waikato Regional Council                                | \$570,470.00 |  | Waikato       |
|   | Kauriology (Gavin Clapperton)                           | \$54,643.69  |  | All           |
|   | Better Biosecurity Solutions Limited- Peter Russell     | \$2,900.00   |  | All           |
|   | Liddle Wonder Ltd                                       | \$6,443.76   |  | All           |
|   | BOPRC   | \$516,734.30 |  | Bay of Plenty |
|   | Biosecurity Research Ltd                                | \$85,000.00  |  | All           |
|   | Te Rūnanga o Ngāti Rehia                                | \$32,000.00  |  | Northland     |
|   | Manaaki Kaimai Mamaku Trust                             | \$25,000.00  |  | Bay of Plenty |
|   | Te Amohia Taiao Charitable Trust (Ngati Aukiwa)         | \$50,000.00  |  | Northland     |
|   | Environs Holdings Limited(Te Uri o Hau)                 | \$95,000.00  |  | Northland     |
|   | Forest Growers Levy Trust Incorporated                  | \$15,000.00  |  | All           |
|   | Ngatikuri Trust Board                                   | \$123,322.00 |  | Northland     |
|   | Te Roroa Commercial Development Ltd                     | \$645,891.00 |  | Northland     |
|   | Te Runanga o te Rarawa Trustee Limited                  | \$242,931.00 |  | Northland     |
|   | Ngatiwai Trust Board                                    | \$185,063.00 |  | Northland     |
|   | Auckland Council (Kohukohunui)                          | \$50,000.00  |  | Auckland      |
|   | Te Runanga o Ngati Porou ki Hauraki                     | \$50,000.00  |  | Waikato       |
|   | Whirinaki Toiora Trust                                  | \$80,000.00  |  | Northland     |
|   | Whangarei District Council                              | \$320,000.00 |  | Northland     |
|   | Ngati Maru ki Hauraki                                   | \$70,000.00  |  | Waikato       |
|   | Motion Sickness   | \$435,000.00 |  | All           |
|   | MWDesign Limited  | \$38,432.00  |  | All           |
|   | Frame Group Limited                                     | \$32,000.00  |  | All           |