

Biosecurity Strategy 2010-2013

1 July 2010

Whatungarongaro o te tangata, toitū te whenua

Tauparapara

Tēnēi au, tēnēi au
Te hōkai nei i taku tapuwae
Ko te hōkai nuku
Ko te hōkai rangi
Ko te hōkai o to tīpuna
A Tanenuiārangi
I pikitia ai
Ki te Rangitūhaha
Ki te Tihi ī manono
I rokohina atu rā
Ko Io matua kore ānake
I riro iho ai
Ngā kete o te wānangā
Ko te kete tūauri
Ko te kete tūatea
Ko te kete aronui
Ka tiritiria, ka poupouā
Ki a Papatūānuku
Ka puta te Ira tangata
Ki te whai āo
Ki te āo marama

Tthei mauri ora!

Translation:

This is the story of how Tane, the progenitor of mankind, of the forest and all the creatures of the forest, ascended through the many realms to the uppermost realm, occupied only by Io-Matua-kore, God-the-parentless, and there obtained from Io, the three baskets of knowledge. Tane returned to earth with the knowledge and there created humankind from the earth.

Cultural Analysis:

This biosecurity strategy pertains to the ever changing environment of pest management. Therefore this tauparapara is relevant in the sense that Tane is the kaitiaki or guardian of all living creatures on earth, that they should live in harmony in their natural environment, maintain their natural habitat in a sustainable manner and forever be protected from harmful sources.

Tane sought knowledge from the highest god, Io, to enable him to learn and practice the most effective and sustainable methods possible without harm to humanity, all living creatures and the land so that they may flourish and forever nourish the earth's eco-systems.

Contents

1. EXECUTIVE SUMMARY	4
2. INTRODUCTION.....	5
3. LINZ’S STATEMENT OF INTENT.....	6
4. LINZ’S BIOSECURITY STRATEGY OBJECTIVES AND ACTIONS	7
5. NEW ZEALAND BIOSECURITY STRATEGY.....	9
6. NEW ZEALAND BIODIVERSITY STRATEGY	13
7. REGIONAL PEST MANAGEMENT STRATEGIES.....	14
8. BIOSECURITY OPERATIONAL MANAGEMENT PLAN.....	16
9. GLOSSARY	17
10. BIBLIOGRAPHY	18

1. Executive Summary

Land Information New Zealand (LINZ) is responsible for a range of biosecurity control work on land under its administration involving the exclusion, eradication and management of pests. Given the nature and extent of LINZ's landholding, biosecurity threats on LINZ administered land may negatively impact on New Zealand's economic prosperity, unique environment, and cultural and social values.

Each year, LINZ develops an annual operational programme to target pests that are present on land under its administration. LINZ operates under the philosophy of acting as a responsible landowner and neighbour. Biosecurity programmes are strategically targeted across the LINZ estate to ensure the best overall outcomes.

This Biosecurity Strategy sets the direction for LINZ's biosecurity function and aligns with several relevant key national and regional strategies, particularly the Biosecurity Strategy for New Zealand, the New Zealand Biodiversity Strategy and Regional Pest Management Strategies prepared under the Biosecurity Act 1993.

The purpose of this strategy is to ensure that biosecurity on LINZ administered land is approached in a way that is consistent with LINZ's Statement of Intent and relevant national strategies. Objectives of the strategy include:

- Adopting a flexible approach to respond to the dynamic and ever changing environment of pest management;
- Adhering to the principles of the New Zealand Biosecurity Strategy;
- Recognising that effective pest management requires collective action;
- Continuously improving sustainable methods and best practice to minimise negative environmental effects;
- Using a strategic approach to ensure biosecurity funding is allocated in areas that achieve the best possible outcomes nationally; and
- LINZ meeting its obligations as a responsible landowner and good neighbour.

2. Introduction

Land Information New Zealand (LINZ) administers almost 3 million hectares of land owned by the Crown, which is approximately 8% of New Zealand's total land area. LINZ's property portfolio includes 1.6 million hectares of high country pastoral land in the South Island, Crown forest land in the North Island, over 5,000 individual properties, and river and lake beds. LINZ aims to help protect the interests of New Zealanders by ensuring this land is put to its best use.

LINZ's functions include:

- acquisition, management and disposal of Crown-owned land LINZ is responsible for;
- management of liabilities arising from Crown-owned land which LINZ is responsible for; and
- a framework for disposal of Crown land by other government agencies.

As part of LINZ's mandate to manage Crown-owned land, it needs to act as a responsible landowner and good neighbour. Central to this role is ensuring that activities which take place on LINZ administered land do not obstruct or unduly impact the rights of adjoining landowners and the wider community. While LINZ's landholding is large, the majority of LINZ administered land is occupied. Occupiers of this land have responsibility for complying with pest management rules, which means LINZ's biosecurity work focuses generally on unoccupied land such as riverbeds and lakebeds.

LINZ needs to make land management decisions which strike an appropriate balance between relevant economic, environmental and social considerations. Biosecurity programmes ensure that LINZ administered land is properly maintained and protected for New Zealanders and visitors to use and enjoy.

Biosecurity is a key responsibility of LINZ. The nature of LINZ's landholding means there is often no occupancy suited to the land, for example riverbeds and lakebeds. Under these circumstances LINZ ensures the best use of this land by reducing the negative impacts caused by pests.

Biosecurity is one of many activities that contribute to economic, social, environmental, and cultural outcomes for New Zealand. LINZ's biosecurity programme for Crown-owned land directly contributes to:

- increased trade and market access for New Zealand products. Pests can severely inhibit productive land use and in some instances may cause export restrictions on our commodities;
- maintained and enhanced economic opportunities, growth and prosperity;
- protection of New Zealand's natural and historical heritage, the integrity of ecosystems, and the character of our landscapes;
- optimised human health and wellbeing;
- healthy and rewarding lifestyles, freedom and respect for cultural expression, and enjoyment of the recreational value of the natural environment; and
- protection of Māori biologically based economic and cultural resources – the relationship of Māori and their culture and traditions with their ancestral lands, waters, sites, waahi tapu, and taonga is maintained and enhanced.

This Biosecurity Strategy sets the direction for LINZ's biosecurity activities and aligns those activities with several key national strategies, particularly the Biosecurity Strategy for New Zealand, the New Zealand Biodiversity Strategy and Regional Pest Management Strategies as prepared under the Biosecurity Act 1993.

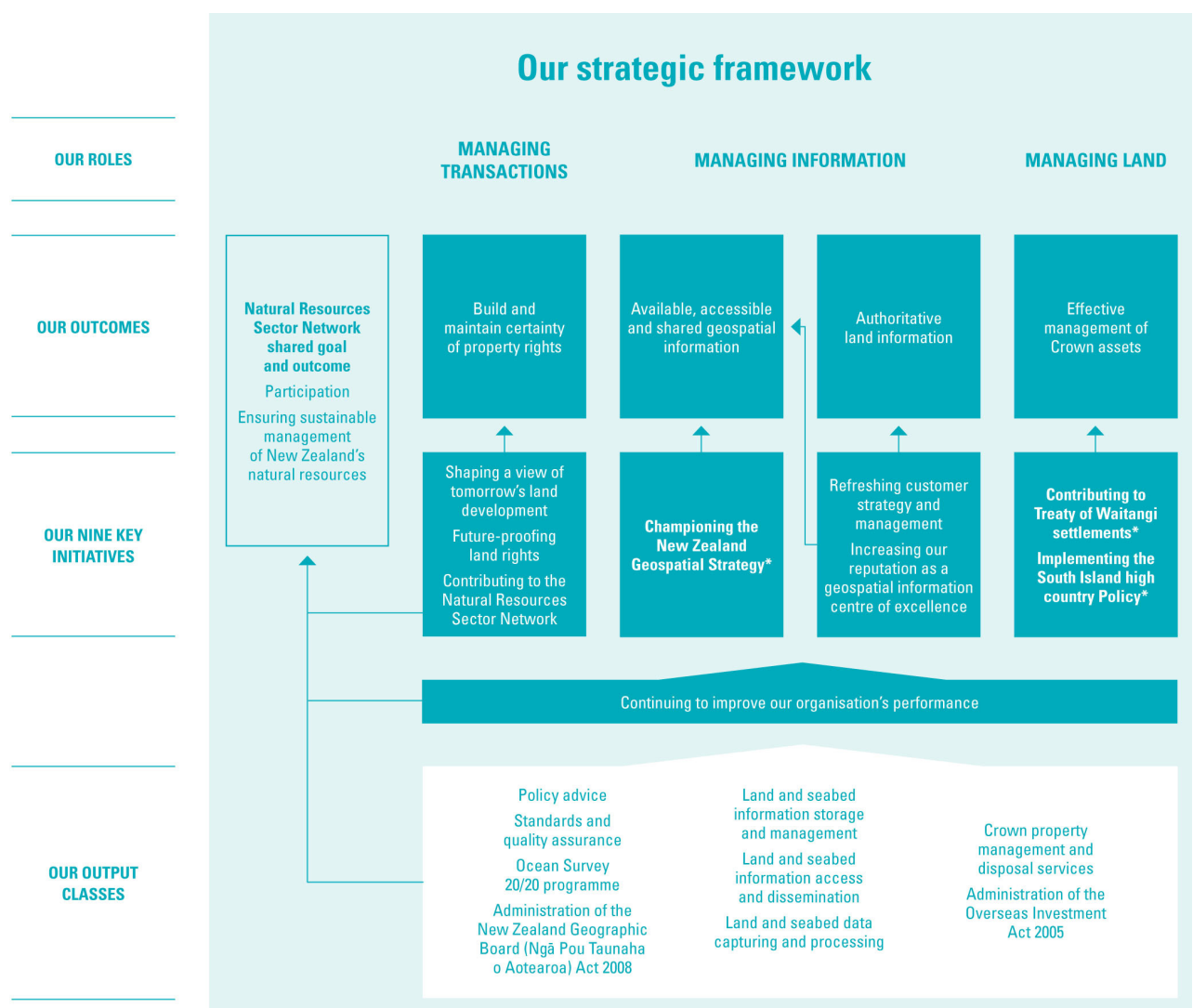
3. LINZ's Statement of Intent

LINZ's Statement of Intent (SOI) for 2010-2013 sets out LINZ's plans for helping to grow the economy and improving the services we deliver to New Zealanders. As an agency LINZ is here to:

- build and maintain confidence in property rights in land and geographic information;
- encourage available, accessible and shared geospatial information in New Zealand; and
- effectively manage Crown assets.

The outcome 'effectively manage Crown assets' is relevant to LINZ's biosecurity function.

LINZ has a responsibility to acquire, dispose of, and administer Crown-owned land, and biosecurity is a key aspect of that administration function.

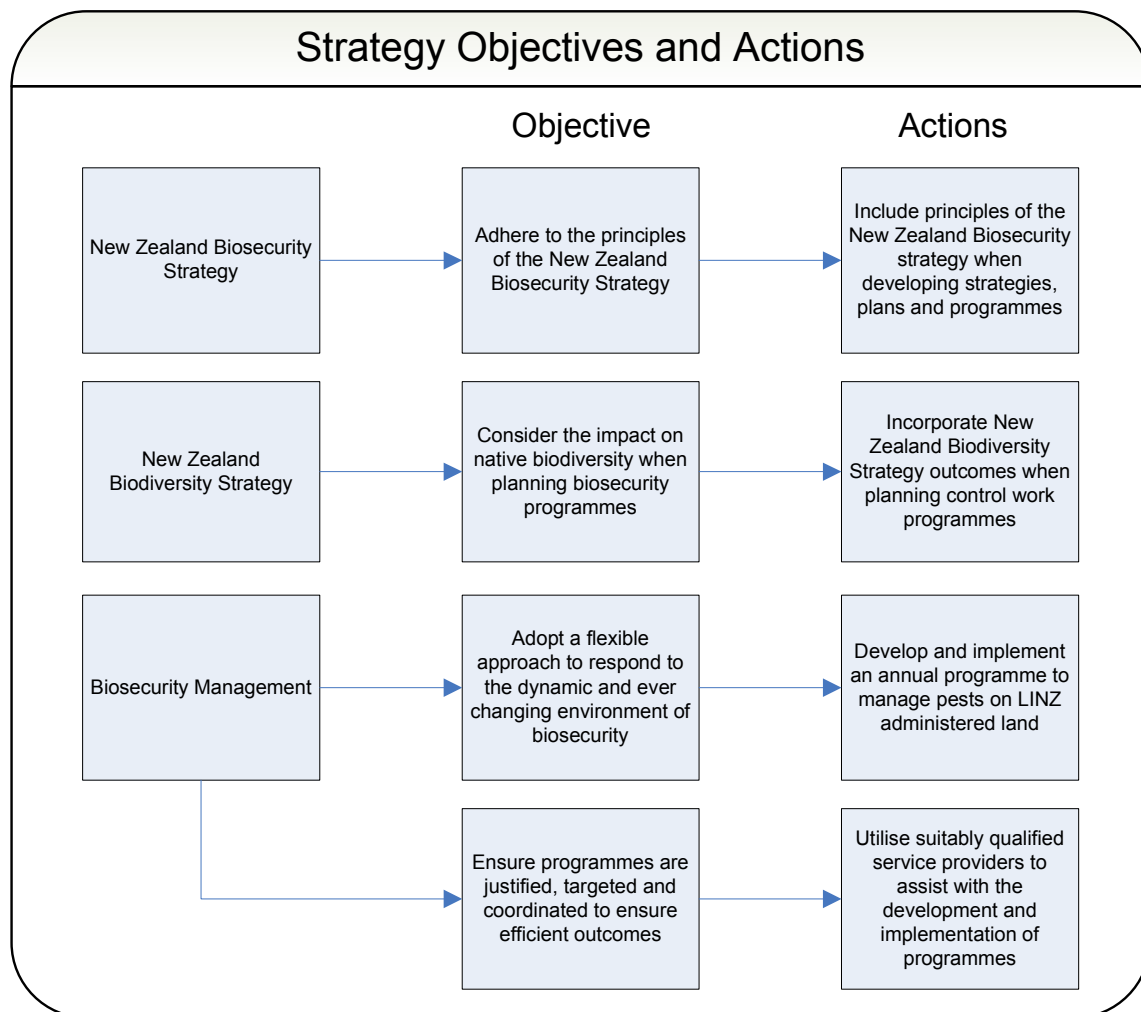


* The Government's three priorities for LINZ.

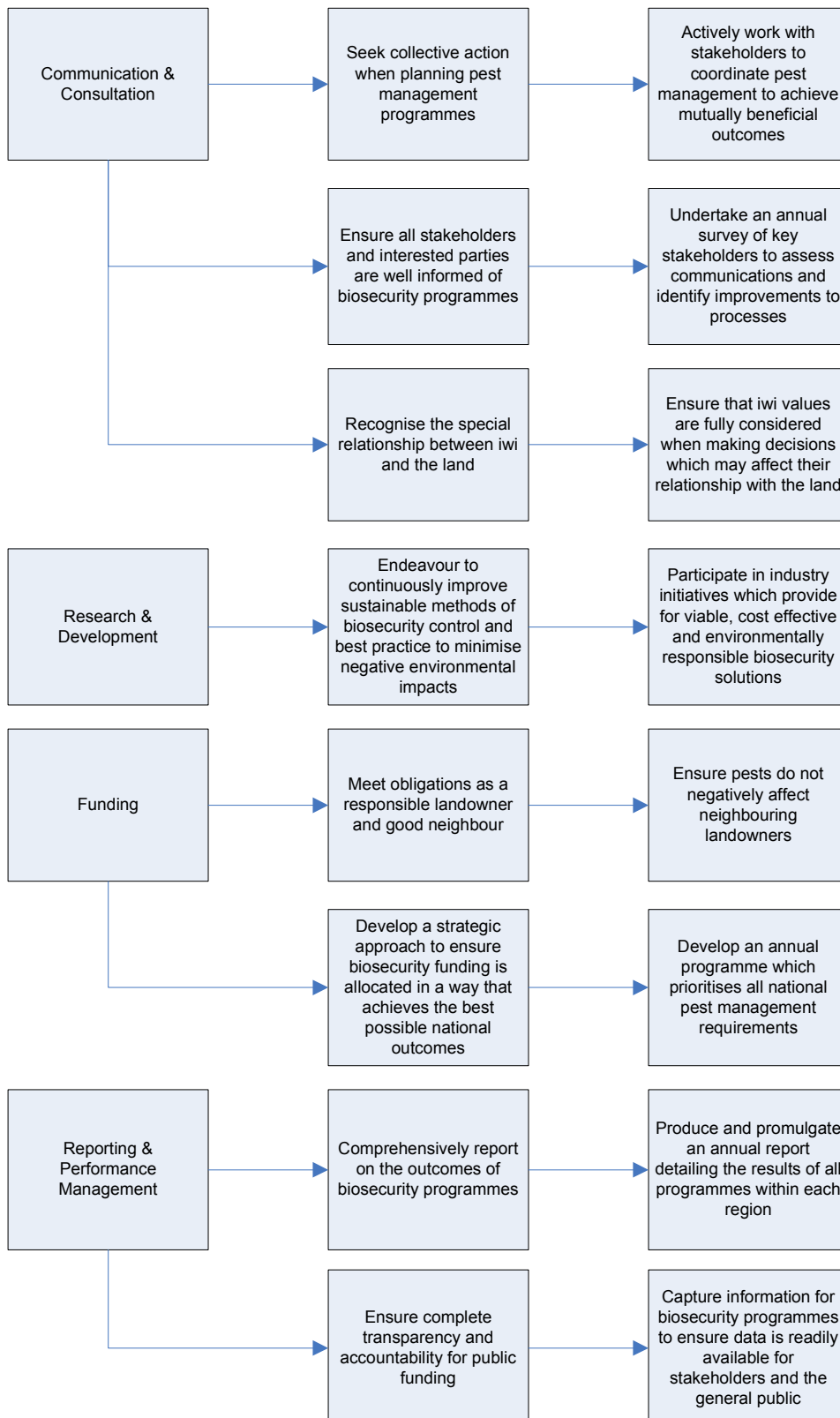
Figure 1: LINZ strategic framework 2010-2013.

4. LINZ's biosecurity strategy objectives and actions

The following strategy objectives and their corresponding actions have been developed to ensure consistent and robust decisions are made when developing and implementing biosecurity programmes on LINZ administered land:



Strategy Objectives and Actions (Continued)



5. New Zealand Biosecurity Strategy

LINZ's biosecurity programmes contribute to the New Zealand Biosecurity Strategy (NZBS)¹. The NZBS sets the vision for protecting New Zealand's unique natural resources, plants and animals, and way of life from damaging pests and diseases.

5.1 New Zealand's Biosecurity System

LINZ recognises that an effective biosecurity system is fundamental to achieving New Zealand's economic and environmental goals. These include:

- protecting primary industries and facilitating exports and tourism;
- protecting indigenous biodiversity;
- enabling sustainable use of natural resources and protection of the natural environment;
- maintaining the relationship between Māori and their culture and traditions with ancestral lands, waters, sites, waahi tapu and taonga;
- protecting the health of New Zealanders from pest borne diseases; and
- reducing the damage caused by pests and diseases.

The NZBS provides a consistent and transparent framework for biosecurity decision making with clear accountabilities and expectations. There are three core sectors in the biosecurity system:

- prevention and exclusion (preventing the entry and establishment of pest and unwanted organisms);
- surveillance and response (early detection, identification and assessment of pests and unwanted organisms so that the appropriate response can be deployed); and
- long term management (effective long term management of established pests and unwanted organisms).

5.2 Pest Management

LINZ primarily operates in the pest management sector. It also participates in surveillance activities and contributes to establishing national priorities and building awareness of pests.

Effective pest management means allocating resources to target particular pests for eradication, containment or control. Resources are limited so it is important to ensure resources are allocated to areas that achieve the best overall net benefit for New Zealand. Management of pests is a community problem, and needs to be resolved through working collaboratively within local, regional and national communities. Accordingly, LINZ places a high emphasis on stakeholder collaboration and extensive consultation when developing biosecurity programmes.

LINZ strives to keep landowners, territorial authorities, community groups and other relevant agencies well informed about its biosecurity programmes to ensure these programmes are streamlined and prioritised appropriately. In some instances it may be appropriate for LINZ to lead or contribute to community or inter-agency projects.

¹ Tiakina Aotearoa Protect New Zealand: The Biosecurity Strategy for New Zealand. August 2003

LINZ has developed and refined its technical knowledge and expertise in certain sectors of pest management² and is well placed to lead research into new techniques or improvements to existing biosecurity tools and processes.

Diquat Prediction Model

An example of new tools and processes is a joint initiative between the National Institute of Water and Atmospheric Research (NIWA) and LINZ. The initiative aims to produce a model that assists contractors to predict the efficacy of using diquat in a water body prior to undertaking control works. Work is continuing with the model, but early indications show it can provide guidance on when to delay or proceed with control programmes.

LINZ recognises the special relationship held between Māori and the land when developing its biosecurity programmes. Taonga are resources highly prized by Māori, including fisheries, indigenous flora and fauna and traditional food gathering places on land, in rivers and at sea. Māori customs and values are deeply respected and LINZ will keep local iwi well informed about its biosecurity programmes where these may be of interest to Māori customs or values. In instances where iwi raise concerns about LINZ's biosecurity programmes, LINZ will engage them to obtain their views. LINZ will ensure it engages with all relevant stakeholders to ensure its biosecurity programmes achieve the desired outcomes.

The New Zealand Biosecurity Strategy (NZBS) has an expectation that the Crown will meet its obligations as a landowner. This is an expectation which can, at times, be difficult to meet within the constraints of allocated funding. Therefore LINZ works with landowners and communities to ensure a collective approach towards biosecurity is taken, and programmes achieve the maximum benefit and highest return nationally within allocated funding. LINZ will continue to work closely with regional councils (as administrators of pest rules under the Biosecurity Act 1993) to ensure programmes achieve the best results possible, while minimising the adverse effects on neighbours.

Development of a national performance measurement framework (PMF) for measuring the effectiveness of biosecurity programmes is being led by the Ministry of Agriculture and Forestry (MAF). LINZ has developed a database to capture extensive data on its own biosecurity programmes to be measured by the PMF. The national PMF will quantify and measure biosecurity programmes against nationally desired outcomes.

² LINZ has significant roles in aquatic pest management, wilding pine management and other species known to inhabit riparian margins.

5.3 Biosecurity Governance Framework

Coordination and communication are essential components of an effective biosecurity system. The nature of pest management is constantly changing as threats evolve and corresponding proactive initiatives are developed.

It is critical that central and local government and industry work together to collectively develop and refine pest management programmes which recognise the needs of New Zealanders. LINZ is committed to leading and contributing to pest management initiatives where these align with our outcomes and objectives.

MAF is the lead agency responsible for biosecurity across government and New Zealand. *Figure 2* shows the mechanisms MAF has established to support delivery of its biosecurity mandate.

National Post Border Biosecurity Governance Arrangements

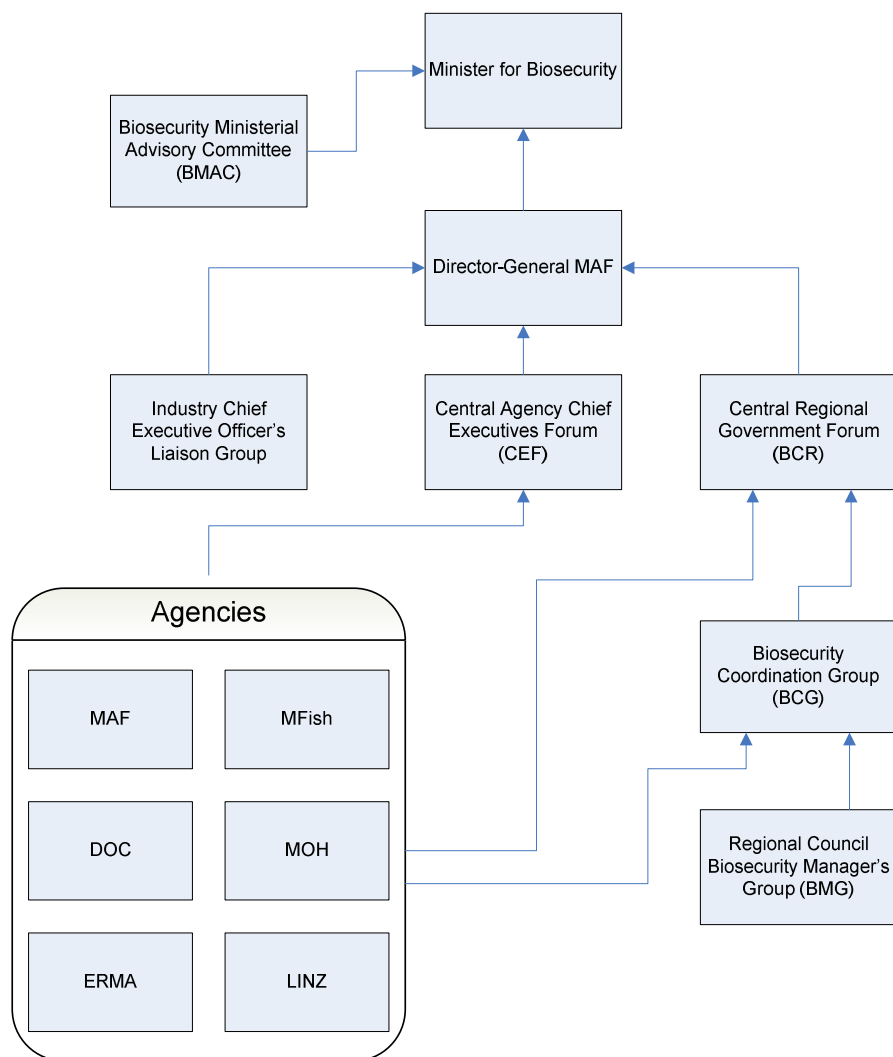


Figure 2: National Post Border Biosecurity Governance Arrangements.

LINZ is an active participant in the biosecurity governance structure, firstly through the BCG and also through the BCR and CEF. The focus of LINZ's biosecurity role is very operational in nature and accordingly LINZ is not heavily involved in some of the more high level strategic aspects of the biosecurity system.

The Central Agency Chief Executives Forum (CEF) is responsible for setting the overall strategic direction for biosecurity, and monitoring the performance of biosecurity programmes.

The Biosecurity Central Regional Forum's (BCR) purpose is to improve coordination and collaboration across central and local government.

The Biosecurity Coordination Group's (BCG) purpose is to provide advice to the BCR and coordinate and align the biosecurity priorities of central and local government. They also maintain an overview of these priorities.

6. New Zealand Biodiversity Strategy

New Zealand's unique native biodiversity and ecosystems are valued as a core part of New Zealand's identity. Much of New Zealand's economic wealth stems from the healthiness of our ecosystems. Examples include tourism, food sources, clean water, carbon sequestration and raw materials. A study in 1997 suggested that New Zealand's biodiversity wealth is more than double New Zealand's GDP³.

Changes in New Zealand's landscapes have had a dramatic impact on New Zealand's biodiversity. Approximately 63% of New Zealand's total land area has been converted into farms, exotic forests, settlements and roads, which affects indigenous biodiversity.

LINZ administers large areas of land which may contain features of ecological significance. LINZ considers that its biosecurity programmes contribute to biodiversity outcomes through the control of exotic pest plants and animals. In many instances the control of exotic species allows native species to regenerate, such as aquatic weed control, wilding tree removal, and clearance of riverbed weeds such as gorse and broom. Due to LINZ's position as administrator of Crown-owned lands, it has an important responsibility to facilitate biodiversity outcomes by:

- allowing community groups to access LINZ land for restoration programmes;
- consulting with conservation and biodiversity groups prior to undertaking biosecurity programmes⁴;
- encouraging native vegetation to grow after treatment of pest plants;
- timing biosecurity programmes so they do not interfere with the breeding cycles of native species;
- ensuring control practices and techniques minimise adverse affects on native ecosystems; and
- contributing to interagency and community strategies to enhance biodiversity.

³ Patterson, M & Cole, A. 1997. Assessing the value of New Zealand's biodiversity. Paper No. 1, School of Resource and Environmental Planning, Massey University.

⁴ For example; Royal Forest and Bird Society, Department of Conservation, Landcare Community Groups and Territorial Local Authorities.

7. Regional Pest Management Strategies

Regional Pest Management Strategies (RPMS) are developed by regional councils under the Biosecurity Act 1993 to manage pests within a region. RPMSs establish rules for the treatment of specific weeds and pests by species and according to their impact. A cost benefit analysis under Section 76.1(l) of the Biosecurity Act 1993 must be undertaken to assess whether the benefits of controlling a particular pest exceeds the costs. Pests are generally split into several categories:

- strategic pests (funded by MAF and/or regional councils);
- total control pests (destroying all known pest plants or animals, which is often undertaken by regional councils and charged to the landowner);
- boundary pests (certain rules are in place to ensure the pest does not spread between landowners' boundaries);
- containment pests (rules focussing on keeping certain pests within a geographic zone); and
- surveillance pests (regional councils monitoring pest populations to ensure they do not increase or spread).

Crown agencies are not bound to pest management rules under the Biosecurity Act 1993, however, LINZ places a high emphasis on meeting RPMS rules and strives to act as if it were bound just as any other landowner⁵. LINZ has responsibilities beyond those of regular landowners as it is responsible for large tracts of marginal land of which little is economically productive or suited to occupancy. This land is typically subject to high public use and is therefore highly susceptible to pest infestation. LINZ's biosecurity control works are prioritised by taking into account:

- directions by Government;
- control works that have been carried out historically where maintenance is required to ensure previous biosecurity gains are retained. In these situations, LINZ is protecting past investments ensuring maximum value for money;
- Pest species being identified under an RPMS, and more specifically as a high priority pest under an RPMS;
- pests spreading from LINZ-administered land to adjacent lands where the landowner is already controlling that pest;
- agreements or Memorandums of Understanding which commit LINZ to contributing to biosecurity control works;
- other parties (for example, Crown agencies, regional councils, community groups, licensees, user groups or landowners) who are contributing to the control of a pest. In these situations, LINZ's contribution ensures maximum return on investment for all parties;
- whether the pest is listed in the National Pest Plant Accord (NPPA);
- how realistic it is to sustain the control works or further build on the success of these works in future years;
- whether the biosecurity control works increase New Zealand's ability to host international events which contribute to New Zealand's economy; and
- the costs versus the benefits of the control works.

⁵ At the time of writing there are proposals before Cabinet to bind the Crown to Regional Pest Management Strategies'

Southland Interagency Group

A good example of collaboration is in Southland. Borne out of a condition of a resource consent issued by Environment Southland to LINZ in 1998, an interagency group was formed between LINZ, Environment Southland, and the Department of Conservation. The purpose of the group was to control gorse, broom and other weeds known to infest riverbed lands. This group is now approaching its 10 year anniversary. Since it was established there have been numerous examples of good cooperation, responsible financial management, and substantial gains to all members of the group, Southland communities, and visitors to the region.

8. Biosecurity Operational Management Plan

LINZ has developed a biosecurity Operational Management Plan (OMP) which provides LINZ staff, service providers and contractors with guidelines on how to implement LINZ's biosecurity strategy, and apply the principles of this strategy to operational activities.

Figure 3 shows LINZ's current governance model for biosecurity. The diagram describes the links between each biosecurity planning document and how the operations undertaken via LINZ's annual programme link into higher level strategies and outputs.

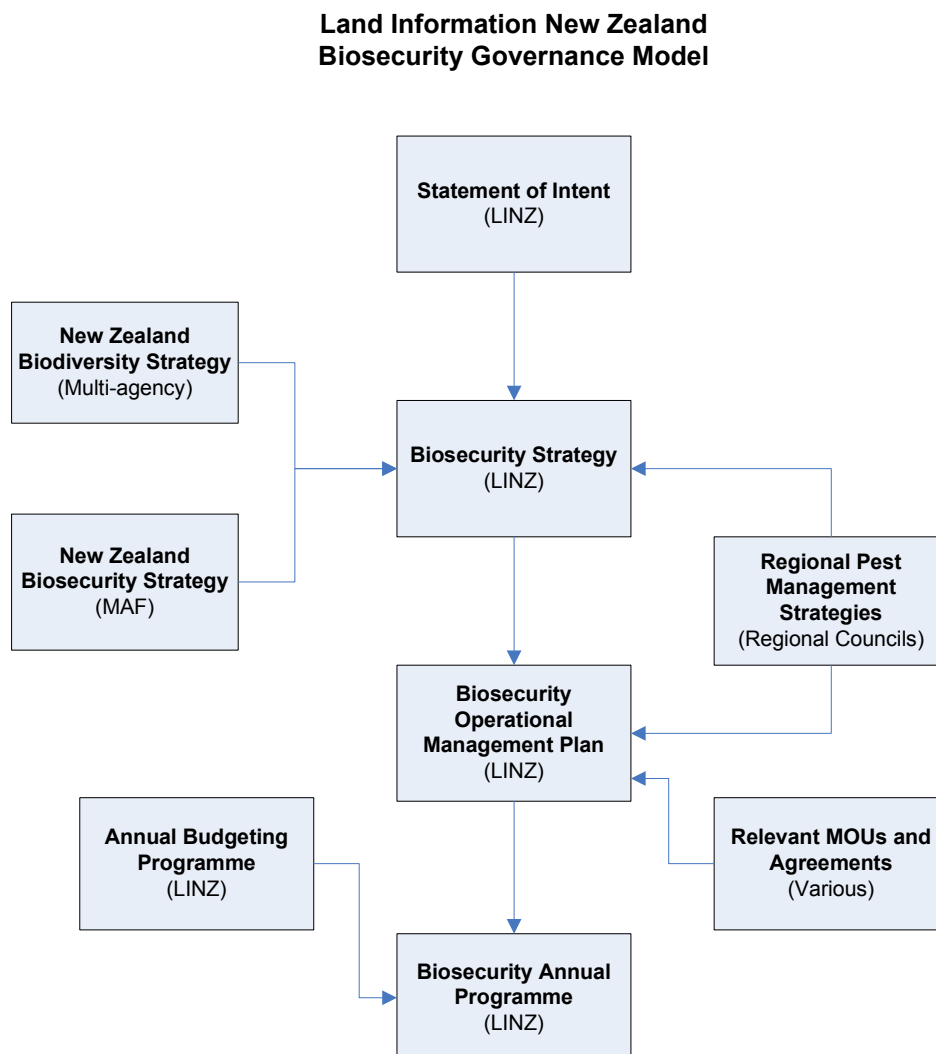


Figure 3: LINZ Biosecurity Governance Model.

9. Glossary

Exacerbator:

Where a pest is spreading from one landowner to another and is negatively impacting on that landowner's use of the land.

Hornwort:

Scientific name *Ceratophyllum demersum*, Hornwort is a highly invasive submerged freshwater weed found in still and flowing waters. It can grow to depths of 16m in clear deep lakes. It is an unwanted organism under the Biosecurity Act 1993 and is banned from sale, propagation, and distribution.

Lagarosiphon:

Scientific name *Lagarosiphon major*, Lagarosiphon or oxygen weed a submerged bottom-rooting perennial which grows up to 5 m tall. Lagarosiphon grows quickly, forming dense mats which block waterways and displace native plants. It is a major weed in hydroelectric dams, also impeding irrigation, drainage and other water uses.

LINZ administered land:

LINZ administered land covers approximately three million hectares of Crown-owned land or eight percent of New Zealand's land area. LINZ administered land is governed by several different Acts including the Land Act 1948, the Crown Pastoral Land Act 1998, Public Works Act 1981, New Zealand Railways Corporation Restructuring Act 1990, Crown Forests Assets Act 1989 and the Soil Conservation and Rivers Control Act 1941.

Regional Pest Management Strategies (RPMS):

Developed by regional councils under the Biosecurity Act 1993, RPMS set rules for landowners to manage certain pests within a region.

Waahi Tapu:

Waahi Tapu are places which hold spiritual and cultural significance to one or more iwi and may be repositories of memory or places where significant historical events have happened.

Wilding Conifers:

This is the collective name given to a range of exotic conifer species which were originally introduced to New Zealand as forestry species, but have naturalised and spread rapidly (particularly in the South Island high country). Wilding conifers threaten biodiversity by displacing native species, disrupt iconic landscapes, significantly reduce water yields in catchments, cause fire risks and prevent productive land use.

Taonga:

Taonga is a treasured thing, whether tangible or intangible, such as land, fisheries, language and spiritual beliefs.

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