



Regional Pest Management Plan

for Gisborne District Council
October 2017

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1.0 Introduction

1.1 Purpose

The purpose of the RPMP is to outline the framework to efficiently and effectively manage or eradicate specified organisms in the Gisborne District. Doing so will:

- minimise the actual or potential adverse or unintended effects associated with those organisms; and
- maximise the effectiveness of individual actions in managing pests through a regionally coordinated approach.

Many organisms in the Gisborne District, or which could infest the Gisborne District, are considered undesirable or a nuisance, creating environmental, economic, social or cultural harm. For some of those organisms it is considered that a pest management plan will add significant value to their management by providing for the eradication or effective management of those pests. It is considered that this value will exceed the value derived from uncoordinated individual action (or inaction).

The RPMP empowers the Gisborne District to exercise the relevant advisory, service delivery¹, regulatory and funding provisions available under the Act to deliver the specific objectives identified in Part Two: Pest Management.

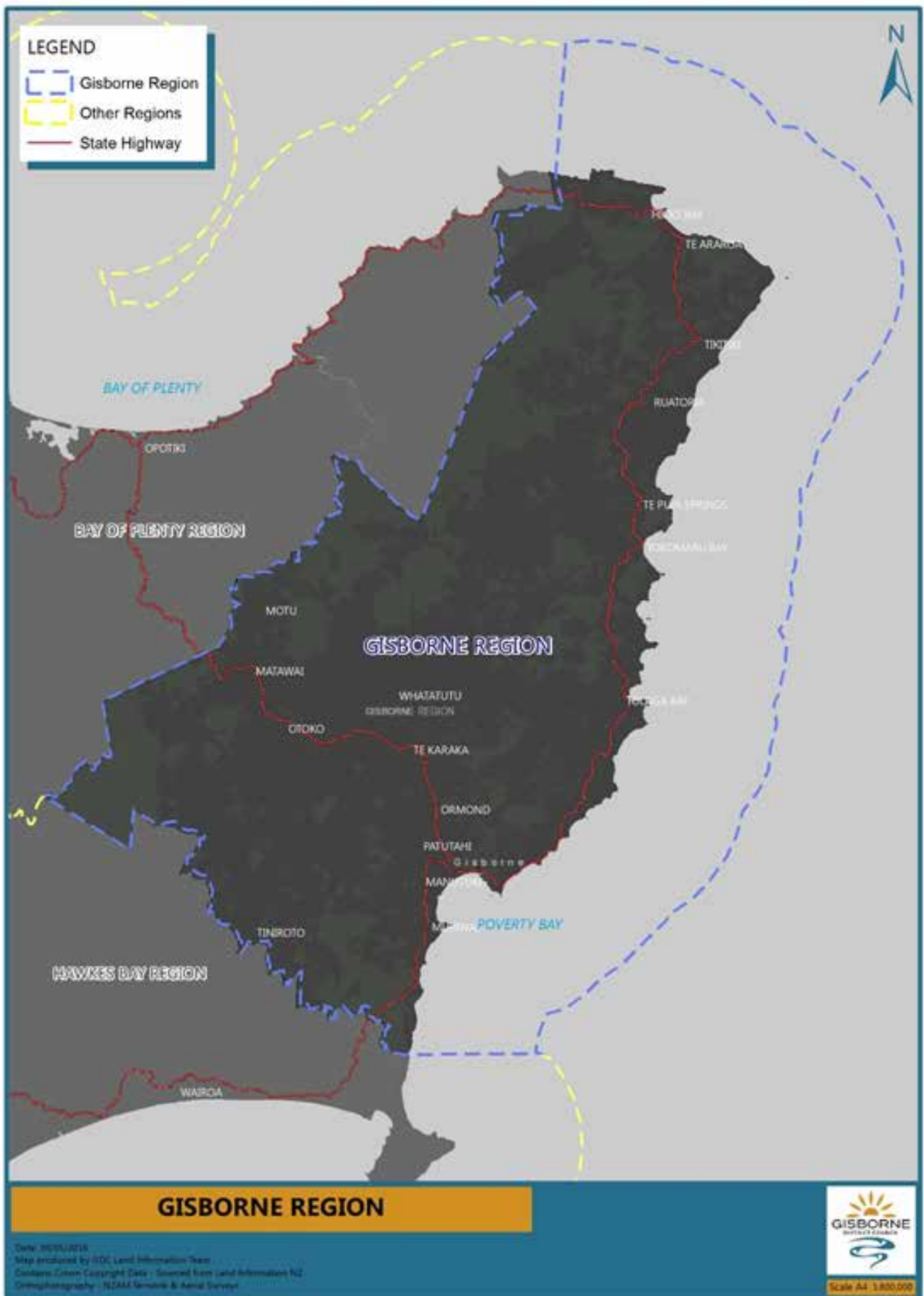
1.2 Coverage

The RPMP operates within the administrative boundaries of the Gisborne Region and covers a total area of 8,355 square kilometres on the east coast of the North Island and extends 12 miles (19.3 km) out to sea.



¹ Rates fund service delivery paid for by ratepayers. However Council's approach is to also work with non-rateable landowners to achieve the outcomes sought from the plan. GDC's service delivery measures apply to both rural and urban landowners.

Figure 1: Area of Coverage of this Regional Pest Management Plan – the Gisborne Region



1.3 Duration

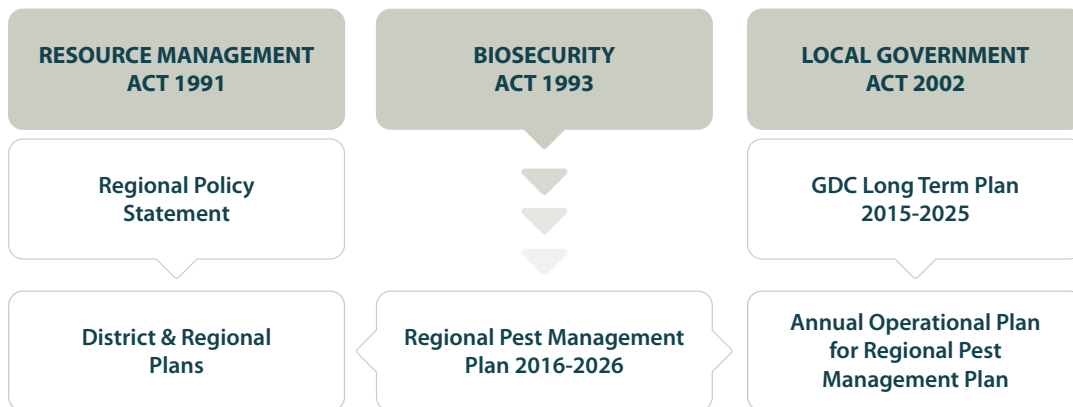
The RPMP will take effect on the date it becomes operative as a Regional Pest Management Plan under s77 of the Act. It will remain in force for a period of 10 years. The RPMP may cease at an earlier date if Gisborne District Council declares by public notice that the RPMP has achieved its purpose. It may also cease at earlier date if, following a review, it is revoked.

2.0 Background

2.1 Legislative Framework

Gisborne District Council (“The Council” or “GDC”) is one of six unitary authorities in New Zealand. This means we have both regional and district Council functions. Council manages air, soil, water, the coastal environment as well as land use in our urban centres, rural land use, and open spaces on behalf of the district².

Figure 2. Legislative Framework



The Biosecurity Act 1993 guides pest management in New Zealand. Regional Councils, or in our case, GDC as a unitary authority, has responsibilities to provides leadership in activities that prevent, reduce, or eliminate adverse effects from harmful organisms that are present in New Zealand (pest management) in its region. The Act says the ways in which the regional council provides leadership in the region includes:

- promoting the alignment of pest management in the region;
- facilitating the development and alignment of regional pest management plans and regional pathway management plans in the region;
- promoting public support for pest management;
- facilitating communication and co-operation among those involved in pest management to enhance effectiveness, efficiency, and equity of programmes;
- promoting co-ordination of pest management between regions.

It also provides guidance on the preparation, implementation and review of regional pest management plans.

The Resource Management Act 1991 (“RMA”) promotes the sustainable management of natural and physical resources. Sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while:

- sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
- safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
- avoiding, remedying, or mitigating any adverse effects of activities on the environment³.

The RMA requires the Council to prepare a Regional Policy Statement (“RPS”) for the Gisborne region. The statement is to promote the sustainable management of the region’s natural and physical resources. The RPS objective for the detrimental effects of pests on integrated resource management is:

- Avoidance or mitigation of the adverse effects of pests on the environment such as, increased soil erosion and reduced indigenous ecosystem and species diversity.

² Long Term Plan, p. 18

³ Resource Management Act 1991.

The Local Government Act 2002 section 93 requires Council at all times to have a long term plan "LTP". The LTP is the key planning tool for councils and its purpose is to:

- describe the council's activities and the community outcomes it aims to achieve.
- provide integrated decision-making and coordination of the resources of Council
- show accountability to the community
- provide an opportunity for participation by the public in council decision-making processes.

The Council's LTP sets the vision and values and outlines all the things the Council will do, how they fit together and how they will be funded. The current Pest Management activity is run by the Environmental and Science Services section of Council.

2.2 Strategic Context for Biosecurity

Gisborne District Councils Long Term Plan 2015-2025 sets out what GDC plans to do for the next ten years. The achievement of our vision, community outcomes and strategic priorities clearly states our people, culture, environment and prosperity come first. See Figure 2.

The community places considerable value in our environment being in a clean and healthy state. This in turn contributes to both our wellbeing and prosperity.

Managing the use, development and protection of our natural and physical resources now and into the future requires Council to use regulatory, science and community approaches to protecting the environment from the negative impact of pests (plants, animal and disease).

TAIRĀWHITI TAONGA

Our environment, culture and economy.

Gisborne is blessed with many natural assets. Our rich coastline, fertile soils, warm climate and abundant freshwater are key to our community's well-being and prosperity. Our unique cultural heritage is a source of enduring pride. We celebrate our dual heritage and collaborate for a healthy future.



ENVIRONMENTAL STEWARDSHIP CARING FOR OUR NATURAL ENVIRONMENT.

Gisborne cares for its environment, us and our mokopuna/grandchildren. Council plans for the sustainable management of our natural and physical environment. We monitor the health of our natural resources and understand the impact of activities on the environment. This knowledge informs our decisions and we aim to achieve balanced development. We support plans and actions that allow our land, soils, waterways and coastlines to be clean, healthy and full of life.



PROSPEROUS TAIRAWHITI FOSTERING ECONOMIC GROWTH AND COMMUNITY WELL-BEING.

Council aims to foster economic growth that supports jobs and business. This is supported by efficient and effective infrastructure, plans and consent processes. The district is attractive to skilled workers, innovators, investors and entrepreneurs. New and growing businesses are encouraged. A strong economy means more jobs and money in people's pockets to achieve their aspirations.



REGIONAL PEST MANAGEMENT PLAN

Principle goal is to limit the adverse effects of unwanted plants and animals. Effects may be on human health, indigenous flora and fauna, our heritage, or the economy.

2.3 What are the values at risk from pests?

2.3.1 Gisborne's rural industries

With an economy that relies largely on agriculture, forestry, horticulture and fisheries, pest management is integral to daily life and livelihood. Invasion of pest species can have a devastating effect and pest control remains a significant ongoing cost for businesses in the agriculture, forestry and horticulture sectors.

2.3.2 Gisborne's unique biodiversity and natural environment

The region's biodiversity includes natural values of international and national significance, encompassing an extensive coastline, dunelands, thick native bushlands and forest, rivers, wetlands and a small number of lakes.

Pest management is vital to maintain the ecological balance, which can easily be tipped, with weeds, animal and insect pests competing directly and altering the habitats of rare and endangered species, and preventing regeneration. Protecting and enhancing indigenous biodiversity is essential to managing water flows, water quality and the stability of the beds and banks of waterbodies. Pest management can also support soil conservation, prevent lake eutrophication and is also vital to reaping the benefits of increased biomass of wood/vegetation and carbon sequestration to be gained from pest control. In Gisborne only 23% of our original native vegetation remains – and some ecosystem types are now only represented by a few 10s of hectares. 14% of the native plants indigenous to Gisborne are threatened as are many of our native birds, frogs, skinks and bats.

2.3.3 Social and cultural values

People of all cultures value Gisborne's natural environment for its amenity and sense of place. The coastal environment, waterways, and native forests are valued for aesthetic, recreational and taonga tuku iho (ancestral) qualities, and are all at risk from the impacts of invasive pest species. Māori cultural values are intrinsically linked to the environment and its guardianship, providing turangawaewae (place to stand) along with accompanying activities such as food gathering, managing indigenous species for future generations.

2.2.4 Health

Pest species can have significant adverse health effects on people. Pest animals can spread disease and pest plants can cause significant allergies.

2.4 Barriers to pest management

There are a number of barriers to pest management. Such barriers include:

- time;
- costs;
- weather;
- technology;
- perceived lack of personal benefit and apathy; and
- ethical concerns.

These barriers are acknowledged and intend to be addressed where possible through education, advocacy and service delivery tools.

2.5 Relationship with other Pest Management Plans

An RPMP must not be inconsistent with:

- any national pest management plan or RPMP that is focused on the same organism; or
- any regulation
- National Policy Direction.

The Gisborne District shares a boundary with Hawke's Bay Regional Council and Bay of Plenty Regional Council. It is in the interests of efficient and effective pest management that the pest management objectives between neighbouring councils are not inconsistent with each other⁴. In developing this Plan, GDC has given regard to the aims and objectives of the pest management strategies of these neighbouring councils. As part of the Plan review process, GDC will work with neighbouring regions to further identify approaches to managing pests common to all RPMPs to ensure GDC's RPMP is not inconsistent with neighbouring council RPMPs.

⁴ GDC is part of the Top of the North Marine Partnership. A Pathway Plan for Marine Pests is a likely outcome of this work programme.

GDC is also aware of, and has given regard to the control of unwanted organisms that are under the auspices of central government agencies. GDC will work with the Department of Conservation, the Ministry for Primary Industries to ensure GDC's RPMP is not inconsistent with their objectives for unwanted organisms.

GDC will also consider national guidelines for wildling conifer management when developing and reviewing the RPMP.

2.6 Relationship with the National Policy Direction

The National Policy Direction (NPD) became active on 17 August 2015. The stated purpose of the NPD is to ensure that activities under Part 5 of the Act (Pest Management) provide the best use of available resources for New Zealand's best interests, and align with each other (when necessary), to help achieve the purpose of Part 5.

The table below sets out the NPD requirements and the steps taken to comply with them.

Table 1: National Policy Direction Requirements and Steps Taken to Comply

NPD REQUIREMENTS	STEPS TAKEN TO COMPLY
Programme is described	Checked that the types of programmes (described in section 5.2 of the Proposal) comply with clause 5 of the NPD.
Objectives are set	Checked that the contents of section 6 of the Proposal comply with clause 6 of the NPD.
Benefits and costs are analysed	Analysed the costs and benefits in accordance with clause 6 of the NPD). That analysis is in the separate Analysis of Costs and Benefits report.
Funding rationale is noted	Checked the funding rationale described in section 9 of the Proposal has been developed in line with clause 7 of the NPD.
Good neighbour rules (GNRs) are described	GNRs have been developed in line with clause 8 of the NPD

2.7 Relationship with Māori

One specific purpose of an RPMP under the Act is to provide for the protection of the relationship between Māori and their ancestral lands, waters, sites, wāhi tapu, and taonga, and to protect those aspects from the adverse effects of pests. Māori involvement in biosecurity is an important part of exercising kaitiakitanga. Iwi in Tairāwhiti also carry out significant pest management through their primary sector economic interests and as land owners and/or occupiers⁵.

Tairāwhiti Piritahi (Fostering Maori participation in Council decision-making) is the strategic policy framework to effect Maori participation in Council planning and decision making processes. Through this policy Council recognises and respects the Crown's responsibilities under Te Tiriti o Waitangi - Treaty of Waitangi. This includes understanding and recognising Te Ao Maori, its values, tikanga and decision-making frameworks being an essential step when developing policy and decision making in Tairāwhiti.

3.0 Responsibilities and obligations

3.1 The management agency

The Gisborne District Council is the management agency responsible for implementing the RPMP and is satisfied that it meets the requirements of s100 of the Act in that it:

- a. is accountable to the Plan funders, including Crown agencies, through the requirements of the LGA 2002;
- b. is acceptable to the funders and those persons subject to the RPMP's management provision because it implemented previous Regional Pest Management Strategies; and
- c. has the capacity, competency and expertise to implement the proposed RPMP.

How Gisborne District Council will undertake its management responsibilities is set out in Part Three (Procedures) of the proposed Plan.

GDC will also:

- Within 3 months of this Plan becoming operative, prepare an Operational Plan for its implementation;
- Review the Operational Plan annually, and if it thinks fit, amend it
- Prepare a report on the Operational Plan and its implementation not later than 5 months after the end of each financial year; and
- Make copies of the Operational Plan and report on its implementation available to the public.

⁵ The term occupiers is used holitically in this plan and includes all landowners, including the Crown and non-rated landowners, all of which are subject to the rules in the plan.

GDC is also the road controlling authority for 1900kms of local roads and has responsibilities for pest management in road reserves.

The principal measures by which GDC will implement this Plan are identified in relation to the individual animal and pest plants described throughout Part 3. The detailed manner in which GDC will undertake its management responsibilities is set out in Part 3 (Procedures) of this Plan.

3.2 Compensation and disposal of receipts

The RPMP does not provide for compensation to be paid to any persons meeting their obligations under its implementation. However, should the disposal of a pest or associated organism provide any net proceeds, a person will be paid disbursement in the manner noted under section 100I of the Act.

3.3 Affected parties

Beneficiaries are people, institutions or activities that, under the RPMP, will experience lower costs, higher production or the benefits of a healthier natural environment and protection of social and cultural values of places.

Exacerbators are people, institutions or activities that through their actions – or inaction, contribute to the creation, continuance or worsening of a pest problem.

3.3.1 Responsibilities of private landowners and/or occupiers

Pest management is an individual's responsibility in the first instance because generally occupiers contribute to the pest problem and in turn benefit from the control of pests. The term occupier has a wide definition under the Act and includes:

- the person who physically occupies the place; and
- the owner of the place; and
- any agent, employee, or other person acting or apparently acting in the general management or control of the place.

Under the Act, place includes: any building, conveyance, craft, land or structure and the bed and waters of the sea and any canal, lake, pond, river or stream.

Owners and/or occupiers must manage pest populations at or below levels specified in the rules. If they fail to meet the rules' requirements, they may face legal action. In some instances, owners and/or occupiers must report pests to Gisborne District Council. They must never sell, propagate, or distribute pests.

An owner and/or occupier cannot stop an authorised person from entering a place, at any reasonable time, to

- find out whether pests are on the property;
- manage pests; or
- ensure the owner and/or occupier is complying with biosecurity law.

While the owner and/or occupier may choose the methods they will use to control any pests, they must also comply with the requirements under other legislation (e.g. Resource Management Act and/or the Hazardous Substances and New Organisms Act 1996).

This Plan treats all private land equitably and emphasises the responsibilities and obligations of all land owners and/or occupiers, including Māori. Council acknowledges the complex and variable relationships of Māori land ownership and occupation. This includes multiple owners (including lessees) or a range of corporate management systems under the Companies Act 1993 or Te Ture Māori Whenua Act 1993. Where owners and/or occupiers are unknown, the Maori Land Court; or the Registrar of Companies may help to identify and communicate with them. The Gisborne region includes approximately 228,000 hectares of Maori land, equal to 28% of the region's land area.

3.3.2 Crown agencies

Four central government agencies occupying the Crown estate have been identified as being significant beneficiaries or exacerbators of pest management in the Gisborne District. Pursuant to Section 5 and Section 69 (5) of the Act, the Act binds the Crown to that extent that a good neighbour rule, or action under a plan to enforce a good neighbour rule in the plan, are the only ways in which a plan may cause the Crown to become liable to meet obligations or costs. GDC will also continue to pursue and maintain formal and informal relationships with Crown agencies to achieve the objectives of this Plan.

3.3.2.1 Department of Conservation

The Department of Conservation (DOC) administers approximately 120,000 ha (c. 14.3% of the total land area) in the Gisborne District. It is an occupier for public conservation land under the Reserves Act 1977 and the Conservation Act 1987. DOC has particular interest and expertise in the area of pest threats to indigenous biodiversity values. There is a strong relationship

between the Plan and DOCs Conservation Management Strategy (CMS). The CMS is a strategic, 10-year document for the region, putting legislation and general policies into practice for DOC's places and resources. The CMS

- identifies how to manage places to achieve national conservation outcomes
- aligns with DOC's strategic direction to clarify priorities for managing conservation resources
- guides decision making, eg on applications to undertake commercial activities and for our own purposes
- guides where recreational activity can occur
- describes conservation outcomes to be achieved through milestones and actions
- provides the basis for reporting to conservation boards.

Weed and pest management is an integral part of achieving the CMS and outcomes sought from it.

3.3.2.2 Land Information New Zealand

Land Information New Zealand (LINZ) administers vacant and non-rateable land, with large areas of Crown Forestry Land in the Whararata and up the East Coast. LINZ also has responsibility for unalienated Crown land in the District and surplus railway land. LINZ is also the management agency for riverbeds.

3.3.2.3 New Zealand Railways Corporation (Kiwi Rail)

Kiwi Rail is the Crown's agent for managing approximately 50 km of land and rail infrastructure in the Gisborne District. This accounts for around 100 ha of non-surplus railway land.

3.3.2.4 New Zealand Transport Agency

The New Zealand Transport Agency (NZTA) is the roading authority for State Highways. NZTA manages approximately 332 km of road and roadside verges and as such is subject to the conditions relating to the management of road reserves identified in Section 3.33 of this Plan.

3.3.2.5 Ministry for Primary Industries

The Ministry for Primary Industries is New Zealand's lead agency for managing biosecurity threats to New Zealand.

3.3.3 Occupiers of Road reserves

Road reserves include the land on which the formed road lies and the verge area that extends to adjacent property boundaries. The Act allows the option of making either roading authorities (NZTA and the GDC [jointly known as Tairawhiti Roads]) or adjoining land occupiers responsible for pest management in road reserves (see s6(1) of the Act).

Except where a rule prevents occupier control⁶, roading authorities are responsible for controlling pests on road reserves that they occupy. Where the road reserve boundary is unknown this will be taken as 10m from the road centreline. Areas where roading authorities are responsible for controlling pests includes:

- rest areas;
- weigh pits and stockpile areas;
- road reserves where road works have contributed to the establishment of named pests;
- road reserves adjacent to land where the landowner is undertaking programmed pest management.

Except where a rule prevents occupier control, adjacent landowners are responsible for controlling pests on road reserves in the following situations:

- unformed paper roads that they occupy, or are contiguous to the land that they occupy;
- on land beyond 10 metres, of the road centreline where the road reserve boundary is unknown;
- where fences encroach onto a surveyed road reserve, the occupier adjoining the road reserve shall be responsible for pests within that fenced area;
- where adjacent occupiers do not support the use of toxins to control pests (eg organic farming practices), the occupier adjoining the road reserve shall be responsible for pest control in the road reserve as well.

Council will work with road authorities including to develop a Code of Practice for good biosecurity practice, by which sub-contractors are required to abide.

Note: Tairawhiti Roads is a shared business unit involving the collaboration of GDC and the NZTA. Tairawhiti Roads brings together the management of the state highway and local roads under one entity.

⁶ This will be within the MOU and associated annual work programme.

4.0 Organisms declared as pests

The organisms listed in Tables 2 and 3 are classified as pests under this Plan. The table also indicates what management programme or programmes will apply to the pest, the agency responsible for management and if a Good Neighbour Rule applies.

Section 5.2 of this Plan sets out the detail of each of the programmes but in summary they are:

1. Exclusion programme (preventing these organisms establishing in the District)
2. Eradication programme;
3. Progressive containment programme (rolling back);
4. Sustained control programme; and
5. Site led programme.

These pests are banned from sale and distribution.

In accordance with section 52 and section 53 of the Act the selling, propagating or distributing any pest, or part of a pest, covered by the RPMP is banned. Not complying with s52 and s53 is an offence under the Act, and may result in the penalties noted in s157(1).

In addition to the pests listed in Tables 2 and 3 there are a number of unwanted organisms that are not present in the District, or in New Zealand for which a central government agency (Department of Conservation or Ministry for Primary Industries) is the lead agency for regulating the distribution, eradication, or exclusion of the pest. Any discovery of these pests by GDC staff will be reported to the lead agency.

A “surveillance” list of potential pests is maintained by the GDC and that ongoing field observation and evaluation is used to gauge their potential threat.

Table 2: Pest Animals

COMMON NAME	SCIENTIFIC NAME	PROGRAMME	LEAD AGENCY	GOOD NEIGHBOUR RULE
Argentine Ant	<i>Linepithema humile</i>	Sustained control	Occupier	Yes
Catfish	<i>Ameiurus nebulosus</i>	Exclusion	GDC	
Chinchilla	<i>Lanigera sp.</i>	Exclusion	GDC	
Darwin's Ant	<i>Doleromyrma darwiniana Forei</i>	Sustained control	Occupier/ GDC	Yes
Feral Cat	<i>Felis catus</i>	Site Led	GDC/ Occupier	Yes
Feral cattle	<i>Bos taurus</i>	Site Led	Occupier	Yes
Feral deer	<i>Cervus spp., Dama dama</i>	Site Led	GDC/ Occupier	Yes
Feral geese	<i>Anser anser</i>	Site Led	Occupier	Yes
Feral goat ⁷	<i>Capra hircus</i>	Sustained Control	GDC/ Occupier	Yes
Feral pig	<i>Sus scrofa</i>	Site Led	Occupier	Yes
Feral pigeon	<i>Columba livia</i>	Site Led	Occupier	Yes
Ferret	<i>Mustela furo</i>	Site Led	GDC/ Occupier	Yes
Hare	<i>Lepus europaeus occidentalis</i>	Sustained Control	Occupier	Yes
Hedgehog	<i>Erinaceinae</i>	Site Led	Occupier	Yes
Koi Carp	<i>Cyprinus carpio</i>	Exclusion	GDC	
Magpie	<i>Gymnorhina hypoleuca</i>	Site Led	Occupier	Yes
Mediterranean Fanworm	<i>Sabella spallanzanii</i>	Eradication	GDC/MPI	
Mosquito fish	<i>Gambusia affinis</i>	Progressive containment	GDC/DOC	
Peacock	<i>Pavo cristatus</i>	Site Led	Occupier	Yes
Perch	<i>Perca fluviatilis</i>	Exclusion	GDC	
Possum	<i>Trichosurus vulpecula</i>	Sustained Control	GDC	
Rabbit (feral)	<i>Oryctolagus cuniculus</i>	Sustained Control	Occupier	Yes

Plague (Rainbow) Skink	<i>Lampropholis delicata</i>	Exclusion	GDC	
Rat	<i>Rattus norvegicus, Rattus rattus</i>	Site Led	GDC/ Occupier	Yes
Rook	<i>Corvus frugilegus</i>	Eradication	GDC	
Rudd	<i>Scardinius erythrophthalmus</i>	Exclusion	GDC	
Stoat	<i>Mustela ermine</i>	Site Led	GDC/ Occupier	Yes
Clubbed tunicate	<i>Styela clavica</i>	Exclusion	GDC/MPI	
Tench	<i>Tinca tinca</i>	Exclusion	GDC	
Wallaby species	<i>Macropus species</i>	Exclusion	GDC	
Wasp	<i>Vespula germanica, V. vulgaris</i>	Site Led	Occupier	Yes
Weasel	<i>Mustela nivalis vulgaris</i>	Site Led	GDC/ Occupier	Yes

Table 3: Pest Plants

COMMON NAME	SCIENTIFIC NAME	PROGRAMME	LEAD AGENCY	GOOD NEIGHBOUR RULE
African feather grass	<i>Cenchrus macrourus/ Pennisetum macrourum</i>	Eradication	GDC	
Agapanthus	<i>Agapanthus praecox</i>	Site Led	Occupier	Yes
Alligator weed	<i>Alternanthera philoxeroides</i>	Exclusion	GDC	
Apple of Sodom	<i>Solanum linnaeanum</i>	Eradication	GDC	
Australian sedge	<i>Carex longebrachiata</i>	Progressive Containment	Occupier	Yes
Banana passionfruit	<i>Passiflora mollissima, P. mixta</i>	Progressive Containment	Occupier	Yes
Barberry	<i>Berberis glaucocarpa,</i>	Sustained control	Occupier	Yes
Bathurst Bur	<i>Xanthium spinosum</i>	Sustained control	Occupier	Yes
Blackberry	<i>Rubus fruticosus agg.</i>	Sustained control	Occupier	Yes
Bladderwort	<i>Utricularia gibba</i>	Exclusion	GDC	
Blue morning glory	<i>Ipomoea indica</i>	Site Led	Occupier	Yes
Boneseed	<i>Chrysanthemoides monilifera</i>	Progressive Containment	Occupier	Yes
Boxthorn	<i>Lycium ferocissimum</i>	Progressive Containment	Occupier	Yes
Broom (exotic)	<i>Cytisus scoparius, Genista monspessulana,</i>			
	Site Led	Occupier	Yes	
Buddleia	<i>Buddleja davidii</i>	Site Led	Occupier	Yes
Burdock	<i>Arctium minus</i>	Progressive Containment	Occupier	Yes
Californian Stink Weed	<i>Navarretia squarrosa</i>	Eradication	GDC	
Cape Tulip	<i>Moraea flaccida</i>	Eradication	MPI	
Chilean Needle Grass	<i>Nasella neesiana</i>	Exclusion	GDC	
Chilean rhubarb	<i>Gunnera tinctoria, G. manicata and all varieties and hybrids of these species</i>	Site Led	Occupier	Yes
Chinese Mugwort	<i>Artemisia veriotiorum</i>	Exclusion	GDC	
Climbing Spindleberry	<i>Celastrus orbiculatus</i>	Eradication	GDC	
Common ivy	<i>Hedera helix</i>	Site Led	Occupier	Yes
Egeria	<i>Egeria densa</i>	Exclusion	GDC	
Giant reed	<i>Arundo donax</i>	Site Led	Occupier	Yes
Goats Rue	<i>Galega officinalis</i>	Exclusion	GDC	
Gorse ⁸	<i>Ulex europaeus</i>	Progressive Containment	Occupier	Yes

⁷ Sustained Control in Northern 1 and 2 Pest Management Units, Site Led in other locations.

Hawthorn	<i>Cretagus monogyna</i>	Sustained control	Occupier	Yes
Holly leaved senecio	<i>Senecio glastifolius</i>	Progressive Containment	Occupier	Yes
Hornwort	<i>Ceratophyllum demersum</i>	Progressive Containment	GDC	
Horse nettle	<i>Solanum carolinense</i>	Eradication	GDC	
Japanese honeysuckle	<i>Lonicera japonica</i>	Site Led	Occupier	Yes
Lagarosiphon	<i>Lagarosiphon major</i>	Eradication	GDC	
Madeira/mignonette vine	<i>Anredera cordifolia</i>	Progressive Containment	Occupier	Yes
Marshwort	<i>Nymphoides geminate</i>	Exclusion	GDC	
Mexican daisy	<i>Erigeron karvinskianus</i>	Site Led	Occupier	Yes
Mexican Waterlily	<i>Nymphaea Mexicana</i>	Exclusion	GDC	
Monkey Comb Vine	<i>Pithecoctenium crucigerum</i>	Eradication	GDC	
Moth plant	<i>Araujia sericifera</i>	Progressive Containment	Occupier	Yes
Nasella tussock	<i>Nasella trichotoma and Nasella tenuissima</i>	Exclusion	GDC	
Nodding thistle	<i>Carduus nutans</i>	Progressive Containment	Occupier	Yes
Noogura Bur	<i>Xanthium strumarium</i>	Exclusion	GDC	
Old Man's Beard	<i>Clematis vitabla</i>	Progressive Containment	Occupier	Yes
Pampas (common and purple)	<i>Cortaderia selloana and C. jubata</i>	Sustained control	Occupier	Yes
Parrots feather	<i>Myriophyllum aquaticum</i>	Progressive Containment	GDC/ Occupier	
Pennisetum/ White Foxtail/Feathertop	<i>Cenchrus longisetus/ Pennisetum villosum and all hybrids</i>	Eradication	GDC	
Periwinkle	<i>Vinca major</i>	Site Led	Occupier	Yes
Phoenix palm	<i>Phoenix canariensis</i>	Site Led	Occupier	Yes
Privet (tree and Chinese)	<i>Ligustrum sinense, L. lucidum.</i>	Site Led	Occupier	Yes
Purple loosestrife	<i>Lythrum salicaria</i>	Exclusion	GDC	
Ragwort	<i>Jacobaea vulgaris/ Senecio jacobaea</i>	Sustained control	Occupier	Yes
Red cestrum	<i>Cestrum elegans and C. fasciculatum</i>	Eradication	GDC	
Reed sweetgrass	<i>Glyceria maxima</i>	Progressive containment	GDC/ Occupier	Yes
Saffron thistle	<i>Carthamus lanatus</i>	Exclusion	GDC	
Salvinia	<i>Salvinia molesta</i>	Exclusion	GDC	
Senegal Tea	<i>Gymnocaronis spilanthoides</i>	Exclusion	GDC	
Smilax	<i>Asparagus asparagoides</i>	Site Led	Occupier	Yes
Spartina	<i>Spartina anglica and S. alterniflora</i>	Progressive containment	GDC/ Occupier	Yes
Spiny Emex	<i>Emex australis</i>	Eradication	GDC	
Sweet briar	<i>Rosa rubignosa</i>	Site Led	Occupier	Yes
Star thistle	<i>Centaurea calcitrapa</i>	Progressive containment	Occupier	Yes
Thorn Apple	<i>Datura stramonium</i>	Sustained control	Occupier	Yes
Undaria	<i>Undaria pinnatifida</i>	Progressive containment	GDC	Yes
Variagated thistle ⁹	<i>Silybum marianum</i>	Progressive Containment	Occupier	Yes
Velvetleaf	<i>Abutilon theophrasti</i>	Eradication	GDC/MPI	
Water hyacinth	<i>Eichhornia crassipes</i>	Eradication	GDC/MPI	
White edged nightshade	<i>Solanum marginatum</i>	Eradication	GDC	
Wild ginger (kahili and yellow)	<i>Hedychium gardnerianum and H. flavescens</i>	Sustained control	Occupier	Yes

Wilding Conifers	<i>Various species</i>	Site Led	Occupier	Yes
Woolly nightshade	<i>Solanum mauritianum</i>	Progressive containment	Occupier	Yes
Yellow flag iris	<i>Iris pseudacorus</i>	Site Led	Occupier	Yes

5.0 Pest management framework

5.1 Objectives

Objectives have been set for each pest or class of pests. As required by the NPD, the objectives include:

- the particular adverse effect/s (s54(a) of the Act) to be addressed;
- the intermediate outcomes of managing the pest;
- the geographic area to which the objective applies;
- the level of outcome, if applicable;
- the period for achieving the outcome; and
- the intended outcome in the first 10 years of the Plan (if the period is greater than 10 years).

The objectives for each pest or class of pest are contained in section 6 as part of the management regime for each pest or class of pests.

5.2 Pest management programmes

One or more pest management programmes will be used to control pests and any other organisms covered by this RPMP. These nationally defined programmes reflect outcomes in keeping with:

- the extent of the invasion; and
- whether it is possible to achieve the desired control levels for the pests.

The intermediate outcomes for five programmes are described below.

- 1. Exclusion Programme:** to prevent the establishment of the pest which is present in New Zealand but not yet established in the District and, which has the potential to become a serious pest in the future. Section 100V of the Act may be used to instigate emergency control of new incursions of pests that are not otherwise listed in this Plan.
- 2. Eradication Programme:** to eradicate the pest across the District. In the short to medium term this involves reducing the infestation level of the pest to zero levels.
- 3. Progressive Containment Programme:** to contain or reduce the geographic distribution of the subject, or an organism being spread by the subject, to an area over time.
- 4. Sustained Control Programme:** to provide for ongoing control of the subject, or an organism being spread by the subject, to reduce its impacts on values and spread to other properties.
- 5. Site-led Pest Programme:** that the pest, that is capable of causing damage to a place or its values is excluded, eradicated, contained, reduced, or controlled within the place to an extent that protects the values of that place.

5.3 Principal measures to manage pests

The principal measures used in the RPMP to achieve the objectives categorised below. Each category contains a suite of tools to be applied in appropriate circumstances.

5.3.1 Requirement to act

Land owners and/or occupiers or other persons may be required to act where RPMP rules dictate:

- a. pests are to be controlled;
- b. management plans are to be prepared and submitted;
- c. the presence of pests is to be reported;
- d. actions are to be reported (type, quantity, frequency, location, programme completion); or
- e. pests are not to be spread (propagated, sold, distributed), and pathways are to be managed (eg, machinery, gravel, animals).

⁸ Progressive Containment in the Western Pest Control areas, Sustained Control elsewhere.

⁹ Progressive containment in the Northern 1 and 2 and Eastern 4 Pest Control Areas, Sustained Control elsewhere.

5.3.2 Council inspection

Inspection by Council may include staff or agents of Council:

- a. visiting properties or doing surveys to determine whether pests are present, or rules and management programmes are complied with, or to identify areas that control programmes will apply to (places of value, exclusion zones, movement control areas);
- b. managing compliance to regulations (rule enforcement, action on default, prosecution, exemptions);
- c. taking limited control actions, where doing so is effective and cost efficient; or
- d. monitoring effectiveness of control.

5.3.3 Service delivery

Council may deliver the service:

- a. where it is funded to do so within a rating district;
- b. on a user pays basis;
- c. by providing control tools, including sourcing and distributing biological agents, or provisions (eg, traps, chemicals).

5.3.4 Advocacy and education

Council may:

- a. provide general purpose education, advice, awareness and publicity activities to land owners and/or occupiers, iwi, industry, other agencies and the public about pests and pathways (and control of them);
- b. encourage land owners and/or occupiers to control pests;
- c. facilitate or fund community and land owners and/or occupier self-help groups and committees;
- d. help other agencies with control, advocacy, and the sharing or sourcing of funding;
- e. promote industry requirements and best practice to contractors and land owners and/or occupiers;
- f. encourage land owners and/or occupiers and other persons to report any pests they find or to control them; or
- g. facilitate or commission research.

5.3.5 Memoranda of Understanding (MOU)

Council will develop MOUs with agencies to establish agreed levels of services from those agencies to act to control pests on their land, or to defer enforcement actions such as good neighbour rules in this Plan in preference for pragmatic levels of service that achieve the objectives of the RPMP. All MOUs will be publicly available alongside any annual Operational Plans. A summary of the MOU will be included in the Annual Operational Plan and the Annual Report will document implementation.

In particular, Council will develop a MOU with the road controlling authorities (Tairāwhiti Roads) to set a programme and levels of service to control pests on road reserves and ensure that procedures for machine hygiene are put in place so that pest control is managed appropriately. This MOU should cover any other area where it is unreasonable to expect adjoining landowners to control pests (e.g. steep topography). This will allow priorities to be determined on an annual basis to assist with planning and implementation.

5.3.6 Collaboration and partnerships

Council will collaborate with other agencies and land occupier groups, including the development of agreements, for the effective management of pests to protect the values of specific sites. Successful pest control relies on the goodwill, cooperation and individual commitment of land occupiers and the community - working in partnership with Council to achieve biodiversity goals and aspirations. This coordinated partnership approach is imperative to achieving the goals of the Plan.

5.3.7 Coordination with neighbouring regions

Council will actively coordinate detection and monitoring programmes with neighbouring regions for exclusion pests.

5.4 Rules

Rules play an integral role in securing many of the pest management outcomes sought by the proposed RPMP. They create a safety net to protect land owners and/or occupiers from the effects of the actions or inactions of others where non-regulatory means are inappropriate or do not succeed. Importantly, amendments to the Act arising from the Biosecurity Law Reform Act 2012 now make the Crown bound by those rules identified as **Good Neighbour Rules (GNR)** in RPMPs.

Section 73(5) of the Act prescribes the matters that may be addressed by rules, and the need to:

- i. specify if the rule is to be designated as a 'Good Neighbour Rule';
- ii. specify if breaching the rule is an offence under the Act;

- iii. specify if an exemption to the rule, or any part of it, is allowable or not; and
- iv. explain the purpose of the rule.

Rules can apply to owners and/or occupiers or to a person’s actions in general.

The NPD and accompanying guidance notes provide extra requirements to include in the rules of a new GNR. Of particular note, the GNR will:

- a. identify who the GNR applies to—either all owners and/or occupiers, or a specified class of owner and/or occupier;
- b. identify the pest to be managed;
- c. state that the pest must already be present on the owner’s and/or occupier’s land;
- d. state that the owner and/or occupier of the adjacent or nearby land must, in the view of the management agency, be taking reasonable measures¹⁰ to manage the pest on their land; and
- e. (if relevant) state the particular values or uses of the neighbouring land that the pests spread affects, and that the GNR is intended to address.

6.0 Pest descriptions

The following section describes the pest management attributes for each pest, or group of pests to be managed under this Plan. This section also describes any rules that will be used to achieve the objectives of the Plan.

For each pest or group of pests listed the Act requires a proposed RPMP to describe the reasons for inclusion, the objective of pest management (see Section 5.2 above), and the principal measures used to achieve the objectives (see Section 5.3 above).

The Act also requires that GDC be satisfied that the pests are capable of causing at some time an adverse effect on at least one of a number of values. To inform the evaluation of the funding of the RPMP (Section 9), GDC has grouped the values into three broad categories:

- Production pests – those that affect the value of economic wellbeing, or affect animal welfare;
- Environmental pests – those that affect the viability of threatened species, indigenous plants or animals, or affect the sustainability of natural ecosystems, ecological processes, and biodiversity, or affect soil resources and water quality; and
- Social/amenity pests – those pests that affect human health, social and cultural wellbeing, or affect the enjoyment and the recreational value of the natural environment, or affect the relationship between Māori, their culture, and their traditions and their ancestral lands, waters, sites, wāhi tapu, and taonga.

These effects are reported for each pest or group of pests under Status in Tables 4, 6, 9, 16, and 22 respectively.

6.1 Exclusion Programme

GDC’s exclusion programme covers species that GDC has opted to be the lead agency or partner for managing new incursions into the District. These pests are at present outside the Gisborne District and have the potential to expand their range and become a problem. At the time of writing this RPMP, these pests have not yet established viable or persistent populations in the District or they have been recently eradicated.

The intermediate outcome for the exclusion programmes is to prevent the establishment of the pest which is present in New Zealand but not yet established in the District and, which has the potential to become a serious pest in the future. Section 100V of the Act may be used to instigate emergency control of new incursions of pests that are not otherwise listed in this Plan.

Reason for Inclusion

Classed as production or environmental pests, GDC believes the pests on the Exclusion Programme are capable of causing adverse effects to the productive capacity of the District, or to the District’s environmental values, as indicated by the Description and by the Status of each of the pest in Table 4 below.

Table 4: Organisms on GDC’s Exclusion Programme

ALLIGATOR WEED	
DESCRIPTION AND ADVERSE EFFECTS	An aquatic perennial herb with floating stems that form dense floating mats. Waxy oval/egg shaped leaves in opposite pairs. Flowers (from December to February) are white in small papery florets in clover-like heads up to 13mm in diameter. Grows quickly and can infest wetlands, ponds, lagoons, stream banks, dune hollows and drains. Has the potential to cause economic losses to lowland pasture and cropping land.
STATUS	Environmental pest. Now in Bay of Plenty.



BLADDERWORT

DESCRIPTION AND ADVERSE EFFECTS

A sprawling submerged aquatic plant with finely divided thread-like leaves with tiny round bladders (often black) which trap small aquatic invertebrates. Small yellow flowers (from summer to autumn). Forms dense mats and is capable of invading wetlands and ponds, potentially displacing native *Utricularia* species.



STATUS

Environmental pest. Absent from District. Present in Bay of Plenty.

CATFISH

DESCRIPTION AND ADVERSE EFFECTS

A fish with a large head with eight long whisker-like barbells around the mouth, dark brown to green on the back with a pale underside. The skin is slimy and eel like to touch, up to 30cm long and 3kg in weight. Prefer warm enclosed waters or slow flowing rivers and canals. Extremely robust and tolerate low oxygen levels, high turbidity, poor water quality and a wide range of temperatures. Reproduces well in natural waterways. Catfish are predators and scavengers that prey upon freshwater snails, koura, bullies and smelt. Are able to stay alive for long periods out of the water. Feeds on freshwater crayfish and may compete with eels.



STATUS

Environmental pest, absent from District. Present in Bay of Plenty.

CHILEAN NEEDLE GRASS

DESCRIPTION AND ADVERSE EFFECTS

An erect, tussocky perennial grass. Primarily a production pest plant, affecting pastoral and arable farming, but capable of invading indigenous ecosystems also. Difficult to control once established.



STATUS

Production pest, absent from District, now in Hawke's Bay.

CHINCHILLA

DESCRIPTION AND ADVERSE EFFECTS

Best known for its remarkably soft fur, it resembles a small rabbit, the ears are almost naked, the whiskers long and the eyes larger. The colour of the fur is bluish-grey with faint dusky markings. They live a communal life in burrows or among rocks from sea level to 20,000 feet. They are nocturnal but will bask in the morning and evening sun. Chinchillas mate for life and the female is the dominant member of the pair. Slightly larger than the male, with litters consisting of 5-6 young. Young are sexually mature at 1 year old. Females may produce up to 3 litters a year. Capable of damage to new crops, impact by selective browsing of palatable plant species. They can cause erosion due to burrowing habits.



STATUS

Production pest, absent from District

CHINESE MUGWORT

DESCRIPTION AND ADVERSE EFFECTS

Upright downy rhizomatous perennial to 2m tall. Unpleasant smell. Leaves lance-shaped. Dies back annually. Cropping weed. Wind dispersed.



STATUS

Production pest, believed eradicated.

10 reasonable measures may include (but is not limited to) active control through chemical, biological or physical measures. In the case of pest animals such as feral goats, deer, pigs and cattle it could include the installation of fencing which ensures the pest animal is not able to invade adjacent land.

EGERIA

DESCRIPTION AND ADVERSE EFFECTS

Submerged perennial freshwater aquatic herb that grows in still and flowing waters. The plant is bottom rooted and produces long, slender and much branched leafy stems that grow to 4 to 5m tall. It is larger and denser than Lagarosiphon having 3-8 whorls. The stems are brittle, fragmenting and rooting easily, impacts on waterbodies and the indigenous biodiversity supported by these systems. They can obstruct waterbodies from rapidly and are capable of forming dense masses which out-compete indigenous aquatic species. The plants can also impede drainage block water intakes, cause flooding and affect water quality. Dispersal is through the vectoring of vegetative fragments. Common vectors of dispersal include boats, trailers, water-skis, fishing equipment, eel nets, boots, dogs, kayaks, jet skis and coarse fish.



STATUS

Environmental pest

GOATS RUE

DESCRIPTION AND ADVERSE EFFECTS

Erect, hairless perennial with an annual growth habit, growing 1-2 m tall from a stout rootstock. Pinnate leaves with four to nine pairs of oval leaflets. Pea like flowers up to 13 mm long borne on many flowered spikes up to 30 cm long, usually pinkish-blue but sometimes deep pink, white, or pale purplish. Spread by movement of gravel from rivers. Prefers river or stream beds, swampland, damp pastures, roadsides, railway lines and waste places. Poisonous to stock – especially sheep.



STATUS

Production pest, absent from District, now in Hawke's Bay.

KOI CARP

DESCRIPTION AND ADVERSE EFFECTS

A large fish up to 75cm in length and can weigh between 5-10kg, has a large head with mouth orientated downwards with distinctive pairs of barbells, one pair at each corner of the mouth. Orange, white, black or gold in colour. Prefer warm enclosed waters or slow flowing rivers and canals. They are tolerant of low oxygen levels and high turbidity. Koi Carp feed by disturbing bottom sediments for food. This activity leads to increased turbidity which affects aquatic plant growth with flow-on impacts on other fish species, invertebrates and wildlife.



STATUS

Environmental pest, absent from District.

MARSHWORT

DESCRIPTION AND ADVERSE EFFECTS

Floating leaved aquatic plant with waterlily shaped leaves. Leaves are bright green on top and often pinkish underneath, can grow up to 10 cm across. Leaves lack a distinct main vein underneath (unlike true waterlilies). Grows from creeping underwater or floating stems. Flowers are yellow and can grow up to 4 cm across. Flowers have 5 petals with each petal having a fringe of hairs on the margin. Dense mats of weed growth can reduce water flow impeding drainage. Dense growth can shade out native submerged vegetation.



STATUS

Environmental pest. Successfully eradicated from Bay of Plenty and Waikato.

MEXICAN WATERLILY

DESCRIPTION AND ADVERSE EFFECTS

Plant has fleshy creeping stems, with banana-like 'brood bodies'. Leaves are waterlily shaped and almost round, growing up to 20 cm across. Leaves have brown or purple blotches on the upper surface and are green or pink on the lower surface. Pale yellow flowers grow up to 15cm across. Dense mats of weed growth can reduce water flow impeding drainage. Biodiversity threat – dense growth can shade out native submerged vegetation.



STATUS

Environmental pest, absent from District. Present in Hawke's Bay.

NASELLA TUSSOCK

DESCRIPTION AND ADVERSE EFFECTS Vigorous perennial grass with numerous drooping fine and wiry leaves. Similar to Mexican Feather Grass a NPPA pest. Plants grow up to 1m tall and have a dense fibrous root system. Flowers (from October to December) are open-branched panicles, purple in colour. Seeds are wind dispersed and can travel up to 16km from the parent plant. Has the capability to invade and replace desirable pasture species, reducing stock carrying capacity by up to 10%.

STATUS Production pest, absent from District, now in Hawke's Bay. Currently at zero density in the BOP (one site at Waioeka)



NOOGURA BUR

DESCRIPTION AND ADVERSE EFFECTS A herbaceous weed with "bur" fruits. This production pest plant affects economic well being and is a significant stock health pest for sheep.

STATUS Production pest, absent from District, now in Bay of Plenty.



PERCH

DESCRIPTION AND ADVERSE EFFECTS A moderately deep bodied species, with 2 large separate dorsal fins, a humped arched back. Has a large mouth and head, olive greenish to grey or brown in colour, up to 600mm long and weighing up to 4kg. Female capable of producing over 2000 eggs depending on her size, if larger able to produce in excess of 10,000 or more eggs. Strongly competitive, eats a variety of vertebrates and invertebrates. Affects water quality. Predates native fish.

STATUS Environmental pest, absent from District. Present in Hawke's Bay.



PURPLE LOOSESTRIFE

DESCRIPTION AND ADVERSE EFFECTS A slow growing, hairy, perennial herb that grows up to 2m tall. Dense purple flowered spikes at the top of each branch that produces thousands of long-lived seeds. Dies back to root crowns over winter. Highly invasive of wetland areas, stream and lake margins, and drains. Has the potential to displace all other wetland plants in lowland wetlands, drastically altering native ecosystems. One of the worst wetland weeds in the USA.

STATUS Environmental pest. Low numbers in Horizons, successfully eradicated from Waikato. Currently at zero density in BOP.



PLAGUE SKINK

DESCRIPTION AND ADVERSE EFFECTS Produces high populations in a short time, competes with native species for food – habitat and space. Plague skinks were first recorded in Auckland during the 1960s. Since then, they have steadily expanded their range through the North Island. Although the adults are smaller than native skinks, they look very similar but can be easily distinguished with one distinctive feature. Plague skinks have one large scale on the top of their head, whereas New Zealand native skinks have two smaller scales. Plague skinks reproduce rapidly – laying up to eight eggs three times per year (more than five times as fast as most native lizards) and mature in less than half the time of native lizards.

STATUS Environmental pest, absent from District. Present in Bay of Plenty.



RUDD

DESCRIPTION AND ADVERSE EFFECTS

Stocky deep bodied fish growing up to 40cm and weighing up to 2kg. Silver orange in colour with a white belly and have bright orange fins. Females are mature by two years of age and can lay tens of thousands of eggs. Ferocious feeders of insects, aquatic plants and other fish, competing with other species for food and degrading native fish habitat.

STATUS

Environmental pest, absent from District



SAFFRON THISTLE

DESCRIPTION AND ADVERSE EFFECTS

Annual thistle which grows to about 1m tall. Infestations can form into impenetrable stands. The plant is woody when mature and is very spiky. The dry sharp spikes get into wool and can cause injury when shearing or handling sheep. Flowers are a distinct yellow. Seeds are large with little down and drop close to the parent plant. They can be carried by stock, water, vehicles, or in dirt.

STATUS

Production pest, absent from District, now in Hawke's Bay.



SALVINIA

DESCRIPTION AND ADVERSE EFFECTS

Small free-floating aquatic fern forming extensive mats. Light green to brown-green rounded leaves overlapping, folded with upper surfaces covered in hairs. Lower submerged leaves look more like roots and can be up to 30cm long. Phenomenal growth rate (can double in 8 days), fragments easily, can survive in damp mud. Tolerates water of any quality, and increased nutrients increase growth rate. Frost-tender, requires high light, high temperature. Spreads by fragmentation only through water movement, deliberate 'liberation' of aquarium contents into ponds or lakes. Covers water surface, blocking light to native species. Rotting vegetation and normal growth consumes oxygen, quickly stagnating water and killing all fauna and flora below.

STATUS

Environmental pest. Successfully managed to zero density in Bay of Plenty and Hawke's Bay.



SENEGAL TEA

DESCRIPTION AND ADVERSE EFFECTS

A perennial aquatic herb which grows to more than 1m tall. It has hollow stems (1m to 1.5m long and 5-20mm in diameter) which become prostrate and take root at nodes. It has dark-green slightly waxy, lance-shaped leaves (50-200mm long by 25-50mm wide) with serrated edges. Flowers (from November to April) are highly scented and clover-like. Grows very quickly and is known to rapidly cover water bodies with a floating mat, excluding other plants and animals that rely on those habitats. The effects of flooding are made much worse because infestations block drainage channels. Recreational activities, irrigation and navigation may also be affected.



STATUS

Environmental pest. Common in Waikato and Horizons, under surveillance in Bay of Plenty.

STYELA CLAVA

DESCRIPTION AND ADVERSE EFFECTS A stalked ascidian that grows in very high densities in marinas and on structures. Spread by vessel movement and also equipment used for aquaculture.

STATUS Environmental pest. Absent from District. Present in Auckland, Coromandel and Tauranga Harbour.



TENCH

DESCRIPTION AND ADVERSE EFFECTS Imported sports fish, native to Europe. Olive green in colour and grow up to 4kg. There is a single small barbel at each corner of the mouth. The fins tend to be thick and fleshy and the body is covered in small scales. Their eyes are bright orange, and this is their most distinctive characteristic.

STATUS Environmental pest. Absent from District.



WALLABY SPECIES

DESCRIPTION AND ADVERSE EFFECTS These mammals are production pest animals that mainly affect pastoral and horticultural values. Classified nationally as an unwanted organism. Regulated also by the Ministry of Primary Industries. Dama wallabies stand 0.5m high and weigh 4-7kg. They are grey-brown in colour with reddish shoulders and are nocturnal. The ears are long and pointed and have a long tapering tail. Prefers bush/pasture margins, using dense vegetation for shelter and cover during the day. Females mature at 1 year old and can produce 1 offspring per year. Impacts on native vegetation by selectively browsing palatable young tree crops.

STATUS Production and environmental pest. Absent from District. Present in Bay of Plenty.



WATER HYACINTH

DESCRIPTION AND ADVERSE EFFECTS Water hyacinth plants consist of a free-floating rosette of shiny rounded leaves with thick masses of feathery roots which hang in the water. The roots are dark in colour and can reach 2.5 m in length. A single flowering stalk with a cluster of mauve-blue flowers, each with a yellow spot, is produced from the rosette. The stalk grows up to 50 cm above the leaf canopy. Plants produce floating horizontal stems from which new plants arise. Mature mats of this plant are held together by these stems. Water hyacinth forms dense mats, completely smothering large waterways and badly affecting water quality. These mats kill off native plants, attract breeding mosquitoes, block dams and irrigation systems, remove oxygen from the water and create a drowning risk for people and animals.

STATUS Environmental pest. Believed eradicated from District.



6.11 Management Regime for the Exclusion Programme

Table 5: Management Regime for Exclusion Programme Pests

MANAGEMENT REGIME FOR EXCLUSION PROGRAMME PESTS	
OBJECTIVE	Over the duration of the Plan, exclude the pests listed in Table 4 from the District to prevent adverse effects on economic well-being and the environment.
PRINCIPAL MEASURES	<p>Service Delivery GDC will undertake control of these pests should they arrive in the District.</p> <p>Council inspection GDC will conduct searches in areas it believes are vulnerable to invasion by the subject species.</p> <p>Advocacy and education GDC will carry out programmes to increase public awareness of the exclusion programme and the threat posed by these pests. These pests will be incorporated into generic biosecurity advocacy programmes.</p> <p>Requirement to Act Occupiers have a duty to inform GDC of the presence of these pests on their land.</p>
AIMS	<ul style="list-style-type: none"> • Detect these pests before they become established in the District • Facilitate a quick response through appropriate funding that will enable control or management of these species.
MONITORING	The organisms listed in Table 4 will be monitored in accordance with Section 7 of this Plan.
OUTCOMES	Economic losses to the primary production sector by these pests are avoided. Native ecosystems are protected from the adverse effects of these pests.

6.1.2 Specific Rules for eradication programme pests

Table 6: Specific Rules for Exclusion Programme Pests

RULE	
Rule 1.01	No person shall release perch, rudd or tench into any water body within the Gisborne region where the introduction has not been previously legally authorised.

6.2 Eradication Programme







The intermediate outcome for the eradication programme is to eradicate the pest across the District. In the short to medium term this involves reducing the infestation level of the pest to zero levels.

GDC's eradication programme covers species which GDC has opted to be the lead agency or partner for eradicating the organisms from the District. These pests are present in Gisborne District but are limited in their size or extent of infestation, or their eradication is feasible and a cost-effective solution to protecting production or environmental values into the future. Many of these organisms are environmental or production pest plants. Pest animals include rook and the recently introduced marine pest the Mediterranean Fanworm.

Reason for Inclusion

Classed as production or environmental pests, GDC believes the pests on the Eradication Programme are capable of causing adverse effects on the productive capacity of the District, or to the District's environmental values as outlined in the Description and Status of each of the pests in the table above. For these species, it is appropriate that GDC be involved in managing these pests rather than relying on voluntary action because successful eradication of these species requires co-ordination of action at a regional scale, and the benefits of the control of many of these pests accrue to a wider community than those directly affected by the presence of the pests on their property. Occupiers are duty bound to inform GDC of the presence of these pests and allow GDC to undertake management, otherwise the eradication objective for these pests is compromised.

Table 7: Organisms on GDC's Eradication Programme

AFRICAN FEATHERGRASS	
DESCRIPTION AND ADVERSE EFFECTS	<p>A robust rhizomatous perennial grass that forms dense tussock up to 2m tall. A distinctive yellow/purple flower (from November to April) on a narrow cylindrical stem up to 300mm long. Round erect purplish-white stems have many fine hairs that break off when touched, causing skin irritations. Unpalatable to stock and can outcompete pasture. Possibly some environmental effects as it prefers damp situations in swampy areas and along borders of streams, though will grow in a range of soil types including sand.</p> <p>Seed is dispersed by sticking to animals, also wind and water. Also spread by creeping rhizomes and through cultivation and infected machinery.</p>
STATUS	Production pest. Three known sites.
	
APPLE OF SODOM	
DESCRIPTION AND ADVERSE EFFECTS	<p>Spreading shrub that grows to 1.4m high. Bright green leaves 5-12.5cm long, 3-8cm wide with 3-4 deep lobes on each side of the midrib. The stems and leaves are covered with prickles that are up to 13mm long. Develops clusters of purple flowers and bright green to yellow fleshy tomato – like fruit. Spreads by seed and rhizomes. Poisonous to humans and stock. Most threat to coastal areas and frost – free inland pasture.</p>
STATUS	Production and amenity pest. One known site.
	
CALIFORNIAN STINK WEED	
DESCRIPTION AND ADVERSE EFFECTS	<p>Spreading annual plant noted for its skunk-like odour. 10-60cm in height with lobed spiny leaves and tubular lilac pink to deep blue flowers up to 12mm in diameter in dense terminal heads, surrounded by spiny sepals and bracts. Flowers Dec-April. Most threat to open, wet, gravelly flats and slopes. Spread by vehicles especially digger-excavators.</p>
STATUS	Production pest. Five known sites.
	
CAPE TULIP	
DESCRIPTION AND ADVERSE EFFECTS	<p>Perennial herb which produces shoots annually from an underground corm in early summer. Plants grow to 90cm tall with a single strap-like leaf and a branched flower stalk. Flowers are salmon pink and 5cm across. Seeds produced in narrow green capsules up to 5cm long. All parts are poisonous – even when dead and dried. Has the potential to establish dense colonies over wide areas of pasture.</p>
STATUS	Production and environmental pest. Five known sites.
 	
CLIMBING SPINDBERRY	
DESCRIPTION AND ADVERSE EFFECTS	<p>Deciduous vine which can grow up to 12m tall. Leaves taper to a point, are 5-10cm long and serrated. Brilliant orange fruit. Shade tolerant vigorous bush and production forest invader that can “wait” for a disturbance in the forest canopy then rapidly grow and spread. Can strangle pine trees.</p>
STATUS	Production (forestry) and environmental pest. Six known sites.
	

HORSE NETTLE

DESCRIPTION AND ADVERSE EFFECTS

Tall perennial herbaceous plant up to 1m tall. Grows from rhizomes and dies back in winter. Dark green leaves up to 10cm long, lobed with spines along upper and lower side of leaves. Stems very spiny. Mauve flowers and large dark green egg shaped berries which turn yellow when ripe. Can dominate pasture and arable land. Toxic to stock and very difficult to control.

STATUS

Production pest. One known site.



LAGAROSIPHON

DESCRIPTION AND ADVERSE EFFECTS

Submerged aquatic weed which can choke waterways and lakes. Spreads rapidly, displacing native plants and making swimming and boating unpleasant. Can grow up to 4m in length, choking and blocking waterways.

STATUS

Environmental pest. Two known sites.



MEDITERRANEAN FANWORM

DESCRIPTION AND ADVERSE EFFECTS

Marine segmented worm living inside a tube which is usually fixed to a hard surface. The worm has a single spiral fan (radiole) which extends out of the top of the tube. The tube is tough and flexible and often muddy in appearance. It can often have other organisms growing on the surface and can grow to over 40 cm high. The fans are white, banded with brown and orange, and the central stem is orange. Is typically found in boats and in harbours and estuaries, living in depths of anywhere between one to 30 metres where it forms dense colonies that could affect native species by competing for food and space. Can be a major fouling problem on structures and boat hulls. Also a threat to fisheries and aquaculture by clogging dredges and fouling other fishing gear when in high densities. It can smother native species such as paua, scallops and mussels.

STATUS

Environmental pest. One known site at Gisborne Port.



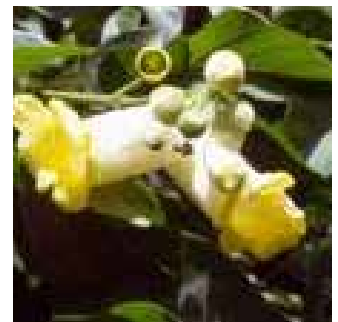
MONKEY COMB VINE

DESCRIPTION AND ADVERSE EFFECTS

Climbing semi-evergreen vine with large tubular creamy flowers. Large spiny woody fruit with winged seeds. Forms a dense root mat and can climb into canopy, smothering native vegetation and inhibiting regeneration.

STATUS

Environmental pest. One known site.



PENNISETUM/ WHITE FOXTAIL/ FEATHERTOP

DESCRIPTION AND ADVERSE EFFECTS

An upright and long-lived grass usually growing only 15-70 cm tall. Its narrow leaf blades are flat or folded with rough margins. Seed-heads are conspicuously feathery and spike-like in appearance (2-12 cm long and 1-2 cm wide). These seed-heads turn from pale green or whitish-green to straw-coloured or whitish as they mature. Their numerous flower spikelets are surrounded by a ring of long whitish coloured bristles (3-7 cm long). Mature seeds are shed enclosed within the ring of bristles. Reproduces both by seed and vegetatively via creeping underground rhizomes. Seeds are spread by wind, water, vehicles and also become attached to animals and clothing. The underground stems (i.e. rhizomes) are dispersed during cultivation, as a result of other soil moving activities (e.g. road construction and maintenance), or in dumped garden waste.



STATUS

Production pest. Two known sites.

RED CESTRUM

DESCRIPTION AND ADVERSE EFFECTS

Smelly shrub to 2-4m with erect stems that are densely covered with purplish hairs when young and become woody as plant matures. Deep crimson scentless flowers 15-25mm long from Jan-Dec. Crimson red berries 7-15mm diameter. Produces many long lived seeds, shade tolerant and grows in most soil types and conditions. Poisonous, not grazed by stock. Very toxic to cattle.



STATUS

Production pest. Four known sites.

ROOK

DESCRIPTION AND ADVERSE EFFECTS

A social bird from the crow family. Adult is glossy black, approximately 50cm in length, and weighs 350-500gm. 2-5 eggs per female are laid each year, fledglings are able to fly within 30 days. Where established, rookeries may approach several hundred birds. Through effective past control rooks are now restricted to occasional birds flying into the District from Wairoa. There is a large area of habitat in the southern part of the District in particular which could support many birds. Extensive damage is caused to maize, pea crops, squash, green feed and cereal crops. Pastured areas are torn in search of grass grub and other invertebrates.



STATUS

Production pest. Solitary birds only. No known sites.

SPINY EMEX

DESCRIPTION AND ADVERSE EFFECTS

Spiny Emex is an annual weed, it has a hard spiny fruit with three points. Produces fruit that are sharp, spiny, hard 1cm long including spines, completely enclosing the glossy triangular 5mm long nut. Seeds fall at the base of seeding plant. Forms a dense clump that can exclude desirable vegetation. Spread by machinery and animals and human assisted. Spiny Emex contains oxalate levels which are sufficient to kill sheep. Spiny Emex can cause lameness in animals, injure humans and downgrade wool quality.



STATUS

Production pest. Eight known sites.

VELVETLEAF

DESCRIPTION AND ADVERSE EFFECTS

Velvetleaf is an annual broad-leaved herb that grows between 1 and 2.5m tall. It has buttery-yellow flowers about 3cm across. It flowers from spring through autumn. Leaves are large and heart-shaped and are velvety to the touch. The plant has distinctive seedpods with 12 to 15 segments in a cup-like ring. Each seedpod is about 2.5cm in diameter. Velvetleaf is one of the world's most invasive pest plants, damaging arable crops by competing with them for nutrients, space and water.



STATUS

Production pest. One site known.

WHITE EDGED NIGHTSHADE

DESCRIPTION AND ADVERSE EFFECTS

A perennial shrub that can grow up to 5m high, easily recognised by its characteristic prickly leaves that have chalky white undersides and edges on the upper side. Produces moderate amounts of seed. Flowers within 5-7 months of germination. Forms dense impenetrable thickets and can invade poor open pasture and other open spaces. Seeds spread by birds, soil movement and livestock. Toxic to stock.



STATUS

Production pest. Two known sites

6.2.1 Management Regime for the Eradication Programme

Table 8: Management Regime for Eradication Programme Pests

MANAGEMENT REGIME FOR ERADICATION PROGRAMME PESTS	
OBJECTIVE	Over the duration of the Plan, eradicate the pests listed in Table 6 from the District to prevent adverse effects on economic well-being and the environment.
PRINCIPAL MEASURES	<p>Service Delivery GDC will co-ordinate and conduct control operations on all private ratable land where these pests are found. Where fiscal or other external restraints to achieving success prevent this, GDC will work on the highest prioritised sites first.</p> <p>Council inspection GDC will conduct searches in areas it believes are vulnerable to invasion by the subject species.</p> <p>Advocacy and education GDC will carry out programmes to increase public awareness of the eradication programme and the threat posed by these pests. These pests will be incorporated into generic biosecurity advocacy programmes. GDC will engage with government agencies for the effective eradication of these organisms from public estate.</p> <p>Requirement to Act Occupiers have a duty to inform GDC of the presence of these pests on their land. GDC will enforce the rules for eradication programme pests as detailed in Table 8. For non ratable land under QEII or Nga Whenua Rahui covenant, or land owned by the Crown, Occupiers are responsible for the control of these pests.</p>
AIMS	<ul style="list-style-type: none"> All known populations occurring of the pests listed in Table 6 will be controlled to zero density by 2026 Facilitate a quick response through appropriate funding that will enable the management of newly identified sites of the pest plants listed in Table 6 as they become known.
MONITORING	GDC will monitor the success of the previous pest control event by recording the extent and/or density of the subject pest in the areas where it is being controlled. Sites will be checked annually for a further 5 years after zero-density has been achieved. Sites will be checked biennially after that. The organisms listed in Table 6 will also be monitored in accordance with Section 7 of this Plan
OUTCOMES	Major economic losses to the primary production sector by these pests in the Eradication Programme is avoided. Native ecosystems are protected from the adverse effects of these pests. The subject pests will be eliminated from the District.

6.2.2 Specific Rules for eradication programme pests

Table 8: Specific Rules for Eradication Programme Pests

RULE	
Rule 1.02	No person shall attempt to kill rooks or control rookeries without prior permission from an authorized GDC staff member.
Rule 1.03	All occupiers who are aware of these pests on the land that they occupy have a duty to inform GDC of the presence of these pests.
Rule 1.04	All vessels entering Gisborne District waters must be sufficiently cleaned and antifouled so that they have no more than a slime layer on the hull.
A breach of these rules will create an offence under Section 154 N (19) of the Act. Any person or corporation who fails to comply with this rule is liable to penalties as prescribed under Section 157 (5) of the Act.	

Explanation of Purpose of the Rules

These Rules will ensure that the Objectives of the Eradication Programme are met and prevent adverse effects on economic well-being and the environment.

6.3 Progressive Containment Programme

GDC's progressive containment programme covers species that GDC has opted to be the lead agency or partner to progressively control the organisms so that their District-wide effects on economic, environmental or social/amenity values do not get any worse. Progressive containment involves pro-actively controlling pests to zero-density in parts of the District, and to actively contain them so they do not spread further. These pests are present in Gisborne District but are limited in their regional range. Total eradication is not a cost-effective solution to protecting production, social/amenity or environmental values into the future, but preventing the spread limits the effects these pests have on these values. All of these organisms are environmental or production pest plants except for privet which is primarily a social/amenity pest.

The intermediate outcome for the progressive containment programme is to contain or reduce the geographic distribution of the subject, or an organism being spread by the subject, to an area over time.

Reason for Inclusion

Classed as production, amenity/social or environmental pests, GDC believes the pests on the Progressive Containment Programme are capable of causing adverse effects on the productive capacity of the District, the social and amenity values of the District, or to the District's environmental values as outlined in the Description and Status of each of the pests in the table above. For these species, it is appropriate that GDC regulate for the management of these pests rather than relying on voluntary action because successful eradication of these species requires co-ordination of action at a regional scale, and the benefits of the control of many of these pests accrue to a wider community than those directly affected by the presence of the pests on their property.

The known extent of the Progressive Containment Pests and their containment area is mapped. GDC believes it is possible to apply the Progressive Containment rules as a means of ensuring that land that is presently clear of the pest remains so.

Table 10: Organisms on GDC's Progressive Containment Programme

AUSTRALIAN SEDGE	
DESCRIPTION AND ADVERSE EFFECTS	<p>A perennial, tussock-forming sedge up to 90cm tall. The leaves are Y-shaped grooved and bluish-green in colour. Flowering stems are triangular and sharply angled flowers are grouped in catkin-like spikes that hang at the end of long, thin nodding stalks. The seed is a small, smooth triangular nut. A prolific seeder, with most seeds falling close to the parent plant. Distinguishable from other species of carex in New Zealand by the way it shoots from the bottom of the original stalk and its distinctive flower/seed head. The plant normally flowers and seeds from October to February. It is generally not palatable to stock. It can form dense stands that exclude pasture species and will spread from infested land onto clear land. It does not compete successfully with well managed pastures. It is a difficult plant to control once established.</p>
STATUS	Production pest.



BANANA PASSIONFRUIT

DESCRIPTION AND ADVERSE EFFECTS

A large, vigorous, scrambling, evergreen vine with clinging tendrils. The leaves are toothed and three-lobed; the flowers are large, pink and tubular. Banana passionfruit flowers in winter-spring. The fruit are yellow when ripe, up to 12cm long, cylindrical with a sweet-flavoured orange pulp surrounding seeds. Can smother forest canopies (up to 10m high) topple shallow rooted trees, and suppress indigenous regeneration. It can invade forest, margins, secondary forest as well as windbreaks, plantations, roadsides and wasteland.

STATUS

Environmental pest



BONESEED

DESCRIPTION AND ADVERSE EFFECTS

A perennial shrub growing to 3m with woody stems and many branches. The leaves are bright to dark green, alternate, toothed and practically hairless; the flowers are bright yellow, daisy-like, with 8-12 petals clustered at the ends of branches. Flowers in September-February. Produces black coloured berries, which are spread by birds. Boneseed is an aggressive colonizer and competes with indigenous species, especially in coastal areas, and is very tolerant of drought.

STATUS

Environmental pest.



BOXTHORN

DESCRIPTION AND ADVERSE EFFECTS

A densely branched evergreen shrub up to 6m tall. It has short branchlets on its stems that end in rigid spines. Leaves oval, small pink flowers and shiny orange poisonous berries. An aggressive invader of sand dunes and coastal sites. Also a troublesome plant on broken country. Seeds are mainly bird dispersed. Forms dense stands that exclude desirable vegetation. Impedes stock movement.

STATUS

Production pest



BURDOCK

DESCRIPTION AND ADVERSE EFFECTS

An upright open-branched perennial shrub up to 1.5m tall. Large leaves with thistle like flower heads, purple reddish, surrounded by hooks that cling to wool and clothes. Stock dispersed. Forms a rosette in its first year of growth, producing a stout grooved stem in second year, 0.5-2.0m tall. A threat to productive land by overtaking desirable species.

STATUS

Production pest



GORSE¹²

DESCRIPTION AND ADVERSE EFFECTS

An evergreen 2-3m tall shrub. The young stems are green, with the shoots and leaves modified into 1-3cm green spines. Young seedlings produce normal leaves for the first few months; these resemble a small clover leaf. The flowers are yellow, 1-2cm and are produced throughout the year, but mainly in early spring. The fruit is a dark purplish-brown pod 2cm partly enclosed by the pale brown remnants of the flower; the pod contains 2-3 small blackish, shiny, hard seeds which are ejected when the pod splits open. Seeds remain viable for 20 years. It forms dense spiny thickets that prevent stock from grazing and reduces pasture production. It can spread between properties from infested to clean land and is a major production pest plant. It provides some benefits as a nursery plant for indigenous species, as a nitrogen fixer and a provider of pollen and nectar for bees. It can also stabilise steep slopes, which reduces the effects of erosion.

STATUS

Production pest.



HOLLY LEAVED SENECIO

DESCRIPTION AND ADVERSE EFFECTS A stout perennial with stems that often become woody up to 1m tall with a profusion of pink-purple flowers. Well-developed plant may produce up to 150,000-200,000 seeds per year of which 80% may be viable. Can form dense patches. Windborne dispersal of seed, stock and contaminated machinery. A plant pest with potential to become a widespread problem along coastal, wasteland areas.

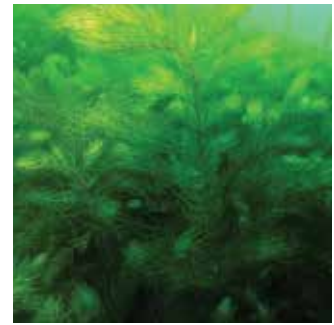
STATUS Environmental pest



HORNWORT

DESCRIPTION AND ADVERSE EFFECTS Submerged freshwater perennial plant found in still or flowing water often found in fertile, nutrient-rich waters but also grows in deep clear lake waters to depths of 14 m. Hornwort does not have roots, but instead has modified base leaves that anchor the plant into muddy substrates.

STATUS Environmental pest



MADEIRA/MIGNONETTE VINE

DESCRIPTION AND ADVERSE EFFECTS A tall, perennial climber, arising from a fleshy rhizome stem produces masses of aerial tubers that fall from the plant over winter and can generate new plants. Usually human dispersed by contaminated garden waste or when tubers and rhizomes are carried by water. Plant grows rapidly and can quickly smother canopy and sub-canopy trees. Can block succession in some situations by forming pure colonies (e.g. forest margins, disturbed forests).

STATUS Environmental Pest



MOSQUITO FISH (GAMBUSIA)

DESCRIPTION AND ADVERSE EFFECTS A small fish, with a stout body, greenish-olive to brownish on the back, grey sides, with bluish sheen; silvery white belly. The tails are rounded and have one rounded dorsal fin, a very small up turned mouth. Produce live young (no eggs), prolific breeders, females reach sexual maturity in just six to eight weeks old. Spread readily down stream or by deliberate liberations into ponds and dams. Although small, Gambusia build up to large numbers quickly and will attack adult native fish and prey on their eggs. Ineffective at mosquito control.

STATUS



MOTH PLANT

DESCRIPTION AND ADVERSE EFFECTS A rapid-growing, vigorous, slender evergreen climbing vine, with milky sap that bleeds from all damaged parts. It can grow up to 10m high and completely smothers low shrubs. Can produce many pods per plant, each containing hundreds of seeds per pod. Seeds can be dispersed by wind over large areas, also carried by water.

STATUS Environmental Pest



12 Progressive Containment in the former Waikohu ward area, Sustained Control elsewhere.

NODDING THISTLE

DESCRIPTION AND ADVERSE EFFECTS

A spiny-leaved (usually) biennial thistle growing up to 1.6m high. The leaves are narrow and oblong, up to 18cm long by 10cm wide, with whitish margins at the bases of marginal spines. Flower stalks can be greater than 75cm tall, with pink, red, purple or (rarely) white flowers that droop at the end of branches. Flowers are followed by seed heads containing many seeds with thistledown. A highly aggressive agricultural pest affecting pasture production and is particularly invasive on light, sandy and volcanic soils. It can form dense stands up to 150,000 plants/ha. Dense infestations obstruct livestock movement and prevent access to pasture. Nodding thistle produces 10,000 seeds per plant with 60-80% viability. Seed may be dormant in the soil up to 20 years. Dispersal mechanisms include via the seed-bank, seed-rain, through machinery, hay, water and stock.



STATUS

Production Pest

OLD MAN'S BEARD

DESCRIPTION AND ADVERSE EFFECTS

A tall, clambering, deciduous, woody perennial climber, growing 20m or more. Produces grey, fluffy balls of seed heads. The leaves are opposite pairs, each of five widely spaced leaflets. Produces greater than 10,000 seeds/sq metre. Seeds remain viable on vines over the winter. Seeds are dispersed by both wind and water, and stem pieces will sprout and re-root whenever they touch ground. The plant can completely shade out canopy species.



STATUS

Environmental pest

PARROTS FEATHER

DESCRIPTION AND ADVERSE EFFECTS

Parrot's feather is a blue-green sprawling perennial plant, which usually forms dense floating mats. Finely divided leaves give the plant a feathery look, and small white flowers are produced at the base of each leaf. Parrot's feather was originally introduced for use in aquatic gardens and fish tanks, and has now infested many of the country's natural fresh water systems. It clogs and chokes waterways, can contribute to flooding and out-competes native water plants.



STATUS

Environmental pest

REED SWEETGRASS

DESCRIPTION AND ADVERSE EFFECTS

This aggressive, perennial, mat-forming grass grows in wetlands and around water edges. It grows to 1.9 m tall with soft, shiny, light-green leaves that end in an abrupt point. Branched flower heads appear in February. Reed sweet grass can rapidly form dense mats, crowding out most native plants. Seeds are long-lived, and rhizomes spread outwards, breaking off and rooting in any damp spot. Toxic to livestock – particularly cattle.



STATUS

Environmental pest

SPARTINA

DESCRIPTION AND ADVERSE EFFECTS

A robust, erect, rhizomatous grass up to 1m tall, with a massive root system. Has wide, ribbed, alternating leaves. Flowers are produced in a head of short flattened spikelets. Once established, forms dense stands. Mainly in saline wetlands, and especially estuaries where it forms dense mats in inter-tidal zones. Can establish in the tidal ends of streams and rivers.



STATUS

Environmental pest

STAR THISTLE

DESCRIPTION AND ADVERSE EFFECTS A short, biennial thistle up to 60cm tall, with a spiny, pink to purple flower head and leaves with bristles rather than spines. Found in Lucerne, pasture and on roadsides. Forms dense stands displacing more desirable species.

STATUS Production pest



UNDARIA

DESCRIPTION AND ADVERSE EFFECTS Undaria seaweed is an annual aquatic, golden brown with a midrib and a divided frond. The main frond has a central mid-rib running the length of it with many finger like leaves. From low inter-tidal to sub-tidal depths of 15m, grows on any hard surface, wharf piles, ship hulls, seawalls, reefs and other artificial structures. Forms dense forests. Undaria has a hold-fast, a stripe (stem) and a sporophyll – spiral, folded reproductive structure which produces many spores. At only 50 days old, Undaria is mature enough to reproduce. Spread of Undaria will smother native seaweed, impact on marine farms, commercial and recreational fisheries and natural environment.

STATUS Environmental pest



VARIAGATED THISTLE¹³

DESCRIPTION AND ADVERSE EFFECTS A large, robust, spiny annual thistle, 0.5-2m tall with large, solitary, spiny flower heads, glossy rosette leaves are variegated with distinctive white blotches and veins. Flowers produce large numbers of seeds which may remain viable for many years. Very aggressive, forms dense impenetrable stands. Prickles may damage stock and can cause nitrate poisoning in sheep and cattle.

STATUS Production Pest



WOOLLY NIGHTSHADE

DESCRIPTION AND ADVERSE EFFECTS A strong growing, greyish-leaved, small tree up to 5m tall. Flowers mauve or purple in dense clusters, leaves large, oval, velvety grey/green. Round green berries that ripen to dull yellow. Large numbers of seeds produced with 95% viability. Most seeds fall close to the parent plant. Birds also contribute to spread. Plant can cause skin irritation and respiratory problems for some people. Can eliminate other species in dense stands.

STATUS Production Pest



6.3.1 Management Regime for mapped progressive containment programme pest plants¹⁴

Table 11: Management regime for mapped progressive containment pest plants

MANAGEMENT REGIME FOR MAPPED PROGRESSIVE CONTAINMENT PEST PLANTS: AUSTRALIAN SEDGE, BANANA PASSIONFRUIT, BONESEED, BOXTHORN, BURDOCK, GORSE ¹⁵ , HOLLY LEAVED SENECIO, MADEIRA VINE, NODDING THISTLE, OLD MAN'S BEARD, SPARTINA, STAR THISTLE, VARIEGATED THISTLE ¹⁶ AND WOOLLY NIGHTSHADE	
OBJECTIVE	Over the duration of the Plan, progressively contain Australian sedge, banana passionfruit, boneseed, boxthorn, burdock, gorse, holly leaved senecio, Madeira vine, moth plant, nodding thistle, old man's beard, Spartina, star thistle, variegated thistle and woolly nightshade within the Progressive Containment Area identified for these plants and reduce adverse effects on economic well-being and the environment.
PRINCIPAL MEASURES	<p>Council inspection GDC will conduct searches in areas it believes are vulnerable to invasion by the subject species.</p> <p>Advocacy and education GDC will carry out programmes to increase public awareness of the progressive containment programme and the threat posed by these pests. These pests will be incorporated into generic biosecurity advocacy programmes.</p> <p>Requirement to Act Occupiers have a duty to inform GDC of the presence of these pests on their land. GDC will enforce the rules for progressive containment programme pests as detailed in Table 12. Occupiers are responsible for the control of Australian sedge, banana passionfruit, boneseed, boxthorn, burdock, gorse, holly leaved senecio, Madeira vine, moth plant, nodding thistle, old man's beard, Spartina, star thistle, variegated thistle and woolly nightshade in accordance with the rules detailed in Table 12. Crown agencies will be bound as a neighbour for the control of these pests where they occur on public or Crown lands in accordance with the Good Neighbour Rules outlined in Table 12 and MOUs where these have been developed. Roading authorities will be responsible for the control of infestations of these pests where they occur within the road corridor in accordance with Rule 1.06 and MOUs where these have been developed.</p> <p>Development of MOUs with Crown Agencies and Roading Authorities Council will develop MOUs with Crown Agencies and Roading Authorities to detail the control approaches to pests on their lands. Information on control priorities and approaches agreed in MOUs will be included in the Council Annual Operational Plan.</p>
AIMS	<ul style="list-style-type: none"> • Within the Progressive Containment Areas for these species prevent their spread from infested land to clean land and on infested land reduce the level of infestation and prevent further seed production. • Within the Active Management Areas for these species manage the pests to zero density by 2026. • To support development and distribution of biocontrol agents for these species.
MONITORING	GDC will monitor the success of the previous pest control event by recording the extent and/or density of the subject pest in the areas where it is being controlled. Sites will be checked annually for a further 5 Years after zero-density has been achieved. Sites will be checked biennially after that. The organisms listed in Table 10 will also be monitored in accordance with Section 7 of this Plan.
OUTCOMES	Native ecosystems and the primary production sector will be protected from the adverse effects of these pest plants. Areas that are clear of these pest plants will remain so.

6.3.2 Specific Rules for mapped progressive containment programme pest plants

Table 12: Specific rules for mapped progressive containment pest plants

RULE	
Rule 1.05	All occupiers shall within 21 calendar days of being notified of the presence of Australian sedge, banana passionfruit, boneseed, boxthorn, burdock, gorse, holly leaved senecio, Madeira vine, moth plant, nodding thistle, old man's beard, Spartina, star thistle, variegated thistle and woolly nightshade shall control or destroy that species located in the place they occupy as identified by an authorised GDC staff member.
Rule 1.06	Every roading authority shall destroy all Australian sedge, banana passionfruit, boneseed, boxthorn, burdock, gorse, holly leaved senecio, Madeira vine, moth plant, nodding thistle, old man's beard, Spartina, star thistle, variegated thistle and woolly nightshade where they occur within the road reserve as defined in Section 3.33 ¹⁷ .
Rule 1.07	All occupiers who are aware of new infestations of these pests on the land that they occupy have a duty to inform GDC of the presence of these pests.
Good Neighbour Rule 1.08	All land occupiers shall on a complaints basis, and unless otherwise agreed between the neighbours and an authorised GDC staff member, destroy banana passionfruit, boxthorn, woolly nightshade, boneseed, Australian sedge, gorse, holly leaved senecio, moth plant, old man's beard, variegated thistle, nodding thistle and star thistle on their land within 50m of a boundary with an adjacent property within 21 calendar days of being notified of the presence of the pest, where the adjacent land occupier is controlling these pests on their land.

13 Progressive containment in the Matakaoa area, Sustained Control elsewhere.

14 Maps of the Progressive Containment Pest Plant Programme areas are included in Appendix B.

15 Progressive Containment in the former Waikohu ward area, Sustained Control elsewhere.

16 Progressive containment in the Matakaoa Area, Sustained Control elsewhere.

Good Neighbour Rule 1.09	All land occupiers shall on a complaints basis, and unless otherwise agreed between the neighbours and an authorised GDC staff member, destroy burdock, spartina and Madeira vine on their land within 10m of a boundary with an adjacent property, within 21 calendar days of being notified of the presence of the pest, where the adjacent land occupier is controlling these pests on their land.
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A breach of these rules will create an offence under Section 154 N (19) of the Act. Any person or corporation who fails to comply with this rule is liable to penalties as prescribed under Section 157 (5) of the Act.

Explanation of Purpose of the Rules

These Rules will ensure that the Objectives of the Progressive Containment Programme are met and prevent adverse effects on economic, social/amenity values and the environment.

6.3.3 Management Regime for progressive containment programme aquatic and marine pests

Table 13: Management regime for progressive containment aquatic and marine pests

MANAGEMENT REGIME FOR PROGRESSIVE CONTAINMENT AQUATIC AND MARINE PESTS: HORNWORT, MOSQUITO FISH, PARROT'S FEATHER, REED SWEETGRASS AND UNDARIA	
OBJECTIVE	Over the duration of the Plan, contain hornwort, reed sweetgrass, parrot's feather, mosquito fish and Undaria to the areas that GDC believes they were restricted to in 2016 to reduce further adverse effects on economic, social/amenity values and the environment.
PRINCIPAL MEASURES	<p>Service delivery</p> <p>GDC may undertake direct control of localized areas of infestation, or of newly discovered small infestations as and when required.</p> <p>GDC will co-ordinate dispersal pathway management. Dispersal risk areas will be identified and targeted for management. The importance of interagency collaborations is recognized and such arrangements will be incorporated wherever possible into GDC's initiatives.</p> <p>Such initiatives can include, but are not restricted to:</p> <ul style="list-style-type: none"> • Erecting signage at both infested and non-infested sites advising of the risk of dispersal via boats, boat trailers, fishing gear, dogs etc.; • Erecting signage that advises ways to implement good hygiene practices; • Producing education material; • Localised weed control at public boat access and swimming areas to minimize the risk of transfer <p>Council inspection</p> <p>GDC staff will conduct searches in areas vulnerable to invasion by these aquatic and marine pest species. In the occurrence of a newly discovered infestation, an assessment of the feasibility of control will be made. Where justified and practicable, new incursions will be controlled. Where new incursions are discovered attempts will be made to trace and confirm vectors. Where feasible, management of these vectors will be implemented.</p> <p>Advocacy and education</p> <p>Advocacy and education are a key component of this programme. All awareness campaigns will be consistent with the National Aquatic Pest Awareness Campaign and the National Marine Pest Awareness Campaign.</p> <p>Requirement to Act</p> <p>Occupiers have a duty to inform GDC of the presence of these pests in their lakes and streams. Occupiers and the general public will act in accordance with the rules for progressive containment aquatic and marine pest plants detailed in Table 14.</p>
AIMS	To prevent the dispersal of aquatic and marine pest species from known locations.
MONITORING	GDC will monitor success by periodically recording the presence or absence of these pests from the District's lakes and Regionally Significant Wetlands. These aquatic and marine pests will also be monitored in accordance with Section 7 of this Plan.
OUTCOMES	The distribution of these aquatic and marine pests is restricted to current infestations and the spread of other aquatic pest plant species throughout the District is slowed. Native ecosystems are protected from the adverse effects of aquatic and marine pests.

17 Roading authorities and Crown agencies will not be in breach of the rule where a MOU between the parties has established agreed pragmatic levels of service for the pest plant species.

6.3.4 Specific Rules for progressive containment programme aquatic and marine pests

Table 14: Specific rules for progressive containment aquatic and marine pests

RULE	
Rule 1.10	No person shall intentionally distribute, propagate or dispose of any or all of hornwort, mosquito fish, parrot's feather, reed sweetgrass or Undaria except at legal landfills or authorized green waste dump sites, or as authorized by a resource consent pursuant to the RMA (1991).
A breach of these rules will create an offence under Section 154 N (19) of the Act. Any person or corporation who fails to comply with this rule is liable to penalties as prescribed under Section 157 (5) of the Act.	

Explanation of Purpose of the Rules

These Rules will ensure that the Objectives of the Progressive Containment Programme are met and prevent adverse effects on economic, social/amenity values and the environment.

6.4 Sustained Control Programme

The intermediate outcome for the sustained control programme is to provide for ongoing control of the subject, or an organism being spread by the subject, to reduce its impacts on values and spread to other properties.

GDC's sustained control programme covers species that must remain controlled to levels where their impacts on the economic, environmental or social values are cost-effectively reduced (that the cost of control is less than the opportunity costs that arise if these pests go unmanaged). These pests are widespread and throughout much of the Gisborne District or have proved impractical to contain once present in an area. Effective coordination is a key aim of the sustained control programme.

Reason for Inclusion

Classed as production, or environmental pests, GDC believes the pests on the Sustained Control Programme are capable of causing adverse effects on the productive capacity of the District, or to the District's environmental values as outlined in the Description and Status of each of the pests in the table above. For these species, it is appropriate that GDC regulate for the management of these pests if voluntary action does not effectively manage the unreasonable cost of externality (boundary) effects from neighbours who are not controlling these organisms. For possums, the continued suppression of the Regional population requires coordination of action at a regional scale, and the benefits of control accrue to a wider community than those directly affected by the presence of the possums on their property.

Table 15: Organisms on GDC's Sustained Control Programme

ARGENTINE ANT	
DESCRIPTION AND ADVERSE EFFECTS	Light to dull brown in colour, two to three millimetres long. Found nesting in shallow ground holes, under piles of lumber, bricks or debris, under stones or boards or under any item that provides protection. Colonies have several queens resulting in a high reproductive rate. Ant colonies will produce up to 500,000 ants and often have several sub colonies. Argentine Ants do not fight each other but instead join together to establish bigger nests and are very aggressive to other ant species and will displace all other ant and insect species. Human assisted transportation in potted plants, rubbish, freight is the main mechanism for long distance dispersal. Otherwise natural spread from nesting source. In homes, Argentine Ants are one of the worst household pests. Because of their sheer numbers and appetite and aggressiveness these ants pose a threat to our natural environment.
STATUS	Environmental and Social/Amenity pest
BARBERRY	
DESCRIPTION AND ADVERSE EFFECTS	An evergreen or semi-deciduous shrub up to 7m tall with spines on stems, singly or in threes. Oval leaves often tinged purple. Small yellow flowers followed by small purple berries. Tolerates a wide range of soil and climatic conditions, shade tolerant, reverting hill country, scrub, forest margins and waste places. Can form thick stands, very invasive in partly open scrub and forests. The seeds are spread mainly by birds. Stump treatment is the only effective form of herbicidal control.
STATUS	Environmental pest



BATHURST BUR

DESCRIPTION AND ADVERSE EFFECTS An erect, well branched annual herb up to 1m tall, with sharp spines in groups of three on leaves. Narrow pointed leaves, fruit are woolly oval burs with long hooked prickles. Pasture, cropping land, coastal places and wasteland. Can form dense patches excluding desirable plants. Dispersed by stock, movement of infected machinery and humans. Mainly a problem to sheep farmers when the bur becomes entangled in wool.

STATUS Production pest



BLACKBERRY

DESCRIPTION AND ADVERSE EFFECTS A prickly, scrambling, woody perennial shrub up to 2m tall bearing large white or pink flowers followed by black berries. Leaves are oval with jagged edges. Very common nuisance weed that if left unchecked can become a major pasture weed that can spread and form dense impenetrable thickets. Fleshy fruit eaten by birds, which then disperse the seed.

STATUS Production pest



BROOM (EXOTIC)

DESCRIPTION AND ADVERSE EFFECTS Erect woolly shrub up to 3m tall, flowers are bright yellow and appear singularly or in clusters on short spikes. Produce thousands of seeds per bush. Large seed-banks can remain viable in the soil for many years. Seeds are dispersed when pods burst explosively in summer and can be transported by water, animals, machinery and also contaminated road gravel.

STATUS Production pest



BUDDLEIA

DESCRIPTION AND ADVERSE EFFECTS A many-stemmed shrub shrub, up to 2-4m tall, has dull green, lanceolate leaves, usually serrated, with stems often hairy. Numerous tapering heads of sweetly scented lilac flowers. Spread by wind, water, machinery and infected road gravel. Buddleia prefers well drained soil, but will grow in a wide range of soils and climates.

STATUS Environmental pest



DARWIN'S ANT

DESCRIPTION AND ADVERSE EFFECTS Darwin's Ants are light to dark honey-brown, and 2mm long. They are similar in appearance to Argentine Ant but give off a strong odour when crushed. They form extremely large colonies and behave similarly to Argentine Ants. They are easily spread by human-related activities and will enter houses in large numbers foraging for sweet foods. They can reach large densities in urban gardens, becoming a nuisance and displace other invertebrates. While they are found predominantly in urban areas and on the margins of native habitats they are an environmental threat to coastal shrublands.

STATUS Social/Amenity and Environmental pest



FERAL GOAT¹⁸

DESCRIPTION AND ADVERSE EFFECTS

Goats vary in size and colour, adult males weigh between 54-58 kg and have a “block” appearance with stout legs designed for climbing. Females are smaller, both have horns, with males being longer. Inhabit a wide range of habitat from sea level to alpine habitat. Farmland, scrub, native and exotic forests provide suitable habitats. Are capable of conceiving at 6 months of age, producing triplets and breeding twice within any year. The main factor in determining the birth rate seems to be food supply. Goats compete with domestic stock for pasture, can alter the species composition of under-story vegetation. Can remove all vegetation from some sites, and thus resulting in soil instability that can cause silting in streams. Actively graze shrubs and tree bark.



STATUS

Environmental pest

GORSE¹⁹

DESCRIPTION AND ADVERSE EFFECTS

An evergreen 2-3m tall shrub. The young stems are green, with the shoots and leaves modified into 1-3cm green spines. Young seedlings produce normal leaves for the first few months; these resemble a small clover leaf. The flowers are yellow, 1-2cm and are produced throughout the year, but mainly in early spring. The fruit is a dark purplish-brown pod 2cm partly enclosed by the pale brown remnants of the flower; the pod contains 2-3 small blackish, shiny, hard seeds which are ejected when the pod splits open. Seeds remain viable for 20 years. It forms dense spiny thickets that prevent stock from grazing and reduces pasture production. It can spread between properties from infested to clean land and is a major production pest plant. It provides some benefits as a nursery plant for indigenous species, as a nitrogen fixer and a provider of pollen and nectar for bees. It can also stabilise steep slopes, which reduces the effects of erosion.



STATUS

Production pest.

HARE

DESCRIPTION AND ADVERSE EFFECTS

A herbivore, similar to a rabbit in appearance but much larger in size and brown in colour. Largely solitary animals and have a large home range of open farmland, plantations, orchards or similar cover. Breeding commences around late June. Gestation period is 42 days and average litter size is only two or three. Females can average four to five litters per year. Breeding commences around late June. Gestation period is 42 days and average litter size is only two or three. Females can average four to five litters per year.



STATUS

Production and environmental pest

HAWTHORN

DESCRIPTION AND ADVERSE EFFECTS

An erect many branched shrub up to 6m tall, with stems that have numerous small branchlets armed with terminal spines. Leaves triangular to ovate coarsely serrated white flowers and red berries. Produces clusters of shiny red berries. Hawthorn can form dense thick impenetrable stands. Seeds eaten by birds and dispersed elsewhere.



STATUS

Environmental and production pest

¹⁸ Sustained Control on the Raukumara/Urewera boundary, Site Led elsewhere.

¹⁹ Progressive Containment in the Western Pest Control areas, Sustained Control elsewhere.

PAMPAS (PURPLE AND COMMON)

DESCRIPTION AND ADVERSE EFFECTS A tall tussock grass (to 4m tall), clump forming with cutting edges to the leaves. Purple Pampas has a large purple flume, whereas in common Pampas the flower flume is white. Seedheads are erect and fluffy – unlike native toetoe which has drooping heads. Seeds dispersed by wind, contaminated gravel and machinery and stock also assist spread. A major problem in forestry blocks.

STATUS Production pest (forestry) / Environmental pest.



POSSUM

DESCRIPTION AND ADVERSE EFFECTS A cat sized marsupial, with oval shaped ears, large eyes, cat-like whiskers and a pointed snout. It has a thick bushy tail and can be grey, brown or black in colour. Females breed from year 1. In ideal conditions can produce 2 offspring per year. Have the ability to cause local extinction of palatable native plant species and cause major forest structure modifications. They are significant silvicultural and horticultural pests and also compete with stock for pasture. They are also known to predate on invertebrates. A widespread and significant pest. Is implicated in the spread of bovine tuberculosis in dairy, beef and deer farming industries in other regions. Possums also compete with stock for pasture – 8 possums eat as much as 1 sheep.

STATUS Production and environmental pest



RABBIT

DESCRIPTION AND ADVERSE EFFECTS About the size of a small domestic cat, grey-brown in colour with a reddish neck and white under parts. Both sexes superficially are alike. Generally found in open habitats including sunny aspects, light soil types, adequate cover close to feeding areas kept closely grazed. Rabbits can breed throughout the year. At peak breeding times they can produce up to 7 litters resulting in 45-50 young per adult per year. Rabbits compete directly with stock for pasture. 8-12 rabbits eat as much as 1 sheep. Though common throughout the District, improved farming practices have reduced their impact.

STATUS Production and environmental pest



RAGWORT

DESCRIPTION AND ADVERSE EFFECTS An erect robust biennial or perennial herb, with flowering stems up to 1.2m tall, leaves are dissected into large lobes, flowers are bright yellow and clustered at the end of the branches. Problem weed in cattle/deer pastures but kept checked by sheep. A well-developed plant may produce up to 250,000 seeds per year of which 80% may be viable. Alkaloids present are toxic to horses, cattle and deer.

STATUS Production pest



THORN APPLE

DESCRIPTION AND ADVERSE EFFECTS A stout, branched, vigorous annual up to 1m tall, with large, white, trumpet shaped flowers. Fruits covered with large spines. Green, egg shaped capsules 3-5cm long and 2-3cm wide, splits open when ripe to expose many large, brown or black, kidney shaped, poisonous seeds. All parts, especially the seeds are poisonous. Usually spread by contaminated machinery, road gravel, contaminated soil and where contaminated stock food has been transported onto pasture land.

STATUS Production pest



VARIAGATED THISTLE²⁰

DESCRIPTION AND ADVERSE EFFECTS A large, robust, spiny annual thistle, 0.5-2m tall with large, solitary, spiny flower heads, glossy rosette leaves are variegated with distinctive white blotches and veins. Flowers produce large numbers of seeds which may remain viable for many years. Very aggressive, forms dense impenetrable stands. Prickles may damage stock and can cause nitrate poisoning in sheep and cattle.

STATUS Production Pest



WILD GINGER (YELLOW AND KAHILI)

DESCRIPTION AND ADVERSE EFFECTS A robust perennial herb with large rhizomes growing up to 2-3m tall. Kahili Ginger displays large yellow flowers while Yellow Ginger has an off white cream flower. Extremely tolerant of shade, it forms large colonies on the fringes of bush along streams, roadsides, in gullies, river flats, disturbed forests, forest gaps. Both varieties spread rapidly from large rhizomes which form into thick mats up to 1m deep in the soil. Can suppress 90% of native vegetation. Dispersed by birds, water movement, soil disturbance, dumping of green waste.

STATUS Environmental pest



6.4.1 Management Regime for Sustained Control Programme

Table 16: Management regime for possums

MANAGEMENT REGIME FOR POSSUMS	
OBJECTIVE	Over the duration of the Plan, sustain control of possums to low densities to reduced adverse effects on economic well-being and the environment.
PRINCIPAL MEASURES	<p>Service delivery</p> <p>GDC will provide ongoing service delivery possum control for Protection Management Areas and Soil Conservation Plantings across the District, and in the buffer area with Hawkes Bay Region to ensure that operational targets are achieved.</p> <p>Where fiscal or other external restraints to achieving success prevent this, GDC will work on the highest prioritised sites for biodiversity or soil conservation values first.</p> <p>Where landowners prefer to undertake their own possum control operations, GDC will undertake monitoring and inspection of properties to ensure the RTCI targets are being met.</p> <p>Where landowners opt into a Community Possum Control Area, GDC will provide initial service delivery, and following that GDC will undertake monitoring and inspection of properties to ensure that RTCI targets are being met.</p> <p>Council inspection</p> <p>GDC staff will conduct searches in areas vulnerable to invasion by these pests.</p> <p>Advocacy and education</p> <p>GDC will carry out programmes to increase public awareness of the roles and responsibilities of occupiers, the programme and the threats posed by possums. GDC will seek to integrate possum control work with Crown agencies where their land is contained inside, or adjacent to, a possum control operation.</p> <p>Requirement to Act</p> <p>GDC will enforce the rules for these pests as detailed in Table 17.</p>
AIMS	<ul style="list-style-type: none"> All the District's Protection Management Areas, Soil Conservation Plantings and a buffer area with Hawkes Bay to be managed under a possum control operation Possum control operations in Protection Management Areas to have possum populations maintained below a density of 5% RTCI or 20% Wax Tag 7-night BMI. Possum control operations on soil conservation plantings of 1-5 year old poles to have possum populations maintained to ensure less than 5% loss of pole plantings. Possum control operations within 1km of the boundary with Hawkes Bay Region to have possum populations maintained below a density of 10% RTCI or 40% Wax Tag 7-night BMI. Support landowners who wish to undertake intensive possum management through the identification of Community Possum Control Areas and manage these under joint Council-landowner possum control operation. Where landowners "opt in" to a Community Possum Control Areas, possum control operations to have possum populations controlled to 5% RTCI or 20% Wax Tag 7-night BMI and then be maintained by the landowner below a density of 10% RTCI or 40% Wax Tag 7-night BMI.

²⁰ Progressive containment in the Northern 1 and 2 and Eastern 4 Pest Control Areas, Sustained Control elsewhere.

MONITORING	GDC will monitor possum density trends in at least 10% of PCAs by 30 June every year, using standard industry protocols and best practice guidelines. GDC will audit the quality of possum control inputs for alignment with industry best practice for all PCAs on an annual basis, by 30 June each year. GDC will monitor environmental outcomes as prescribed in management plans for high-value natural areas prioritized for protection under any regional biodiversity programme.
OUTCOMES	Damage to native ecosystems, forestry, soil conservation plantings, crops, horticulture and pasture production areas is suppressed to 2015 levels or lower. The risk of disease transmission from possums to livestock, pets and humans is reduced. The diversity of the District's indigenous flora and fauna is protected from loss attributed to possums. The effectiveness of any soil conservation planting is not reduced as a consequence of possum browse.

6.4.2 Specific Rules for possums

Table 17: Specific rules for possums

RULE	
Rule 1.11	In the Community Possum Control Areas, all occupiers shall, when required to act, within 21 calendar days of being notified of the presence of possums, control or destroy that species located in the place they occupy to meet 10% RTCI targets as identified by an authorized GDC staff member.
Rule 1.12	In the Sustained Control Programme areas, all occupiers shall: <ul style="list-style-type: none"> • Allow council staff, contractors or agents to carry out pre-and-post control monitoring uniformly across all properties to determine the RTCI percentage. • Allow staff contractors or agents to carry out monitoring of biodiversity, soil conservation and production outcomes as determined by Gisborne District Council • Not impede or hinder the progress of such monitoring operations.

A breach of these rules will create an offence under Section 154 N (19) of the Act. Any person or corporation who fails to comply with this rule is liable to penalties as prescribed under Section 157 (5) of the Act.

Explanation of Purpose of the Rules

These Rules will ensure that the Objectives of the Sustained Control Programme for possums are met and prevent adverse effects on economic wellbeing and the environment.

6.4.3 Management Regime for Rabbits, Feral Goats and Hares

Table 18: Management regime for feral rabbits

MANAGEMENT REGIME FOR RABBITS	
OBJECTIVE	Over the duration of the Plan, sustain control of feral rabbits to reduce adverse effects on economic well-being and the environment.
PRINCIPAL MEASURES	<p>Service delivery GDC may provide service delivery for feral rabbits in selected sites valued for biological diversity or soil conservation where it is deemed feral rabbits are a threat to environmental values. GDC may provide service delivery for feral rabbits in selected sites where it is deemed rabbits are a threat to production. GDC may conduct control operations on small populations of rabbits, or provide tools for feral rabbit control, in urban or peri-urban situations where control by occupiers would otherwise be difficult.</p> <p>Council inspection GDC staff will conduct searches in areas vulnerable to invasion by these pests.</p> <p>Advocacy and education GDC will carry out programmes to increase public awareness of the roles and responsibilities of occupiers, the programme and the threats posed by feral rabbits. Feral rabbits will be incorporated into generic biosecurity advocacy programmes.</p> <p>Requirement to Act GDC will enforce the rules for these pests as detailed in Table 19. Crown agencies will be bound as a neighbour for the control of these pests where they occur on public or Crown lands in accordance with the Good Neighbour Rule outlined in Table 19.</p>
AIMS	<ul style="list-style-type: none"> • Feral rabbit populations in rural areas to be kept below a level acceptable (Level 5 on the Modified McLean Scale 2012) for reducing externality effects on neighbours and for reducing environmental damage.
MONITORING	Monitoring and reporting will be in accordance with Section 7 of this Plan.
OUTCOMES	Severe pastoral losses and soil damage caused by feral rabbit population explosions are avoided. Any unreasonable costs imposed by a neighbour who is not controlling feral rabbits are avoided.

6.4.4 Specific Rules for Feral Rabbits

Table 19: Specific rules for feral rabbits

RULE	
Good Neighbour Rule 1.13	All occupiers shall, where a feral rabbit control operation is being undertaken on directly adjacent land, on a complaints basis, and unless otherwise agreed between the neighbors and an authorised GDC staff member, undertake control to keep rabbit infestation levels on their land within 1 km of the adjacent property boundary to below Level 5 of the Modified McLean Scale 2012.
A breach of these rules will create an offence under Section 154 N (19) of the Act. Any person or corporation who fails to comply with this rule is liable to penalties as prescribed under Section 157 (5) of the Act.	

Explanation of Purpose of the Rules

These Rules will ensure that the Objectives of the Sustained Control Programme for feral rabbits are met and prevent adverse effects on economic wellbeing and the environment.

6.4.5 Management Regime for sustained control plant pests

Table 20: Management regime for feral goats

MANAGEMENT REGIME FOR FERAL GOATS:	
OBJECTIVE	Over the duration of the Plan, sustain control of feral goats adjacent to high value natural areas in the Ruakumara and Urewera Ranges to reduce adverse effects on the environment.
PRINCIPAL MEASURES	<p>Service delivery GDC may provide service delivery for feral goats in selected sites valued for biological diversity or soil conservation where it is deemed feral goats are a threat to environmental values.</p> <p>Council inspection GDC staff will conduct searches in areas vulnerable to invasion by these pests.</p> <p>Advocacy and education GDC will carry out programmes to increase public awareness of the roles and responsibilities of occupiers, the programme and the threats posed by feral goats. Feral goats will be incorporated into generic biosecurity advocacy programmes.</p> <p>Requirement to Act GDC will enforce the rules for these pests as detailed in Table 21. Crown agencies will be bound as a neighbour for the control of these pests where they occur on public or Crown lands in accordance with the Good Neighbour Rule outlined in Table 21.</p>
AIMS	<ul style="list-style-type: none"> Feral goat levels on the Raukumara/Urewera boundary are kept below a level where they do not undermine goat control being undertaken by the Department of Conservation and Bay of Plenty Regional Council.
MONITORING	Monitoring and reporting will be in accordance with Section 7 of this Plan.
OUTCOMES	Any unreasonable costs imposed by a neighbour who is not controlling feral goats are avoided.

6.4.6 Specific Rules for Feral Goats

Table 21: Specific rules for feral goats

RULE	
Good Neighbour Rule 1.14	All occupiers shall, where a feral goat control operation is being undertaken on directly adjacent land, on a complaints basis, and unless otherwise agreed between the neighbors and an authorised GDC staff member, act to significantly reduce the chance of goat from their property re-infesting the adjacent property. Actions may include direct control, mustering for removal or fencing ²¹ .
A breach of these rules will create an offence under Section 154 N (19) of the Act. Any person or corporation who fails to comply with this rule is liable to penalties as prescribed under Section 157 (5) of the Act.	

Explanation of Purpose of the Rules

These Rules will ensure that the Objectives of the Sustained Control Programme for goats are met and prevent adverse effects on economic wellbeing and the environment.

6.4.7 Management Regime for Hares

Table 22: Management regime for hares

MANAGEMENT REGIME FOR HARES	
OBJECTIVE	Over the duration of the Plan, sustain control of hares to reduce adverse effects on economic well-being and the environment.
PRINCIPAL MEASURES	<p>Service delivery GDC may provide service delivery for hares in selected sites valued for biological diversity or soil conservation where it is deemed hares are a threat to environmental values. GDC may provide service delivery for hares in selected sites where it is deemed hares are a threat to production values. GDC may conduct control operations on small populations of hares.</p> <p>Council inspection GDC staff will conduct searches in areas vulnerable to invasion by these pests.</p> <p>Advocacy and education GDC will carry out programmes to increase public awareness of the roles and responsibilities of occupiers, the programme and the threats posed by rabbits and hares. Hares will be incorporated into generic biosecurity advocacy programmes.</p> <p>Requirement to Act GDC will enforce the rules for these pests as detailed in Table 23. Crown agencies will be bound as a neighbour for the control of these pests where they occur on public or Crown lands in accordance with the Good Neighbour Rule outlined in Table 23.</p>
AIMS	Hare populations in rural production areas at risk of hare damage to be kept at less than 1 hare/kilometre in order to reduce externality effects on neighbours and to reduce economic damage.
MONITORING	Monitoring and reporting will be in accordance with Section 7 of this Plan.
OUTCOMES	Damage to horticulture and crops caused by hares are minimized. Any unreasonable costs imposed by a neighbour who is not controlling hares are avoided.

6.4.8 Specific Rules for Hares

Table 23: Specific rules for hares

RULE	
Good neighbour Rule 1.15	All occupiers shall, where a hare control operation is being undertaken on directly adjacent land, on a complaints basis, and unless otherwise agreed between the neighbors and an authorised GDC staff member, keep hare infestation level on their land within 1km of the adjacent property boundary to less than 1 hare/kilometre.
A breach of these rules will create an offence under Section 154 N (19) of the Act. Any person or corporation who fails to comply with this rule is liable to penalties as prescribed under Section 157 (5) of the Act.	

Explanation of Purpose of the Rules

These Rules will ensure that the Objectives of the Sustained Control Programme for hares are met and prevent adverse effects on economic wellbeing and the environment.

6.4.9 Management Regime for sustained control pest plants

Table 24: Management regime for sustained control pest plants

MANAGEMENT REGIME FOR SUSTAINED CONTROL PEST PLANTS	
OBJECTIVE	Over the duration of the Plan, manage these pest plants to reduce further adverse effects on economic wellbeing, social/amenity values and the environment. Maintain these pests so they do not reach a level where they are causing significant external impact. Avoid the spread of these pest plants onto uninfested land.
PRINCIPAL MEASURES	<p>Advocacy and education</p> <p>GDC will carry out programmes to increase public awareness of the sustained control programme and the threat posed by these pests. It will provide information to the public on dispersal strategies (eg wind, water, birds) and appropriate control methods which recognise these. These pests will be incorporated into generic biosecurity advocacy programmes.</p> <p>Requirement to act</p> <p>Occupiers will act in accordance with the rules for these pest plants detailed in Table 25. Crown agencies will be bound as a neighbour for the control of these pests where they occur on public or Crown lands in accordance with the Good Neighbour Rules outlined in Table 25 and MOUs where these have been developed. Rooding authorities will be responsible for the control of infestations of these pests where they occur within the road corridor in accordance with the Rules outlined in Table 25 and MOUs where these have been developed.</p> <p>Development of MOUs with Crown Agencies and Rooding Authorities</p> <p>Council will develop MOUs with Crown Agencies and Rooding Authorities to detail the control approaches to pests on their lands. Information on control priorities and approaches agreed in MOUs will be included in the Council Annual Operational Plan.</p>
AIMS	<ul style="list-style-type: none"> To reduce effect of the spread of these pests across boundaries on production and the environment. To investigate and support biocontrol options for these species To promote on farm and site specific biosecurity risk assessments and encourage best management practice for risk pathways.
MONITORING	These pests will be monitored in accordance with Section 7 of this Plan
OUTCOMES	<p>The values of high value native ecosystems, communities and the primary production sector will be protected from the adverse effects of these pest plants.</p> <p>The spread of these pests between properties will be reduced.</p> <p>The spread of these pests throughout the District will be reduced.</p>

6.4.10 Specific Rules for Sustained Control Pest Plants and Pest Ants

Table 25: Specific rules for sustained control pest plants and pest ants

RULE	
Good Neighbour Rule 1.16	All occupiers shall on a complaints basis, and unless otherwise agreed between the neighbors and an authorised GDC staff member, destroy barberry, blackberry, hawthorn, thorn apple, wild ginger, Australian sedge, gorse, variegated thistle, broom, pampas and buddleia on their land within 50m of a boundary with an adjacent property within 21 calendar days of being notified of the presence of the pest, where the adjacent land occupier is controlling these pests on their land ²² .
Good Neighbour Rule 1.17	All occupiers shall on a complaints basis, and unless otherwise agreed between the neighbors and an authorised GDC staff member, destroy Bathurst bur on their land within 10m of a boundary with an adjacent property within 21 calendar days of being notified of the presence of the pest, where the adjacent land occupier is controlling these pests on their land ²¹ .
Good Neighbour Rule 1.18	All occupiers shall on a complaints basis, and unless otherwise agreed between the neighbors and an Authorised Person, destroy Argentine and Darwin's Ants within 200m of a boundary with an adjacent property within 21 calendar days of being notified of the presence of the pest, where the adjacent land occupier is controlling these pests on their land ²¹ .
Good Neighbour Rule 1.19	All land occupiers shall on a complaints basis, and unless otherwise agreed between the neighbours and an authorised GDC staff member, destroy ragwort within 50m of a boundary with an adjacent property within 21 calendar days of being notified of the presence of the pest, where the adjacent dairy farm occupier is controlling these pests on their land ²¹ .
A breach of these rules will create an offence under Section 154 N (19) of the Act. Any person or corporation who fails to comply with this rule is liable to penalties as prescribed under Section 157 (5) of the Act.	

²² Rooding authorities and Crown agencies will not be in breach of the rule where a MOU between the parties has established agreed pragmatic levels of service for the pest plant species.

Explanation of Purpose of the Rules

These Rules will ensure that the Objectives of the Sustained Control Programme for barberry, Bathurst bur, blackberry, broom, buddleia, hawthorn, pampas, ragwort, star thistle, thorn apple, variegated thistle and wild ginger are met and prevent adverse effects on economic wellbeing and the environment.

6.5 Site Led Programme

The intermediate outcome for the site led programme is that the pest, that is capable of causing damage to a place or its values is excluded, eradicated, contained, reduced, or controlled within the place to an extent that protects the values of that place.

GDC's site led programme covers species that GDC has opted to be the lead agency or partner for ensuring these organisms remain controlled to levels here their impacts on the economic, environmental or social values of a particular place are minimized. These pests are widespread and throughout the Gisborne District however their impacts are primarily on particular values of locations and this means they are best managed in order to ensure those values of that place are retained.

Site Led Programmes will be identified using the criteria in Table 27:

Table 26: Criteria for Site Led Programmes

PLACE	CRITERIA
AREAS OF SIGNIFICANT BIODIVERSITY	<ul style="list-style-type: none"> Identified in a Gisborne District Council RMA Plan as a regionally significant natural area or area of important biodiversity. Examples include Protection Management Areas identified in the Combined Regional Land and District Plan, Coastal Protection Areas identified in the Regional Coastal Management Plan and Regionally Significant Wetlands identified in the Regional Freshwater Plan. Areas set aside by statute or covenant or by the Nature Heritage Fund, Nga Whenua Rahui or the QE II National Trust specifically for the protection of biodiversity. Areas identified in a Department of Conservation Conservation Management Strategy or similar strategic document as a priority for weed and pest management in order to protect biodiversity values. National Parks or Marine Reserves. <p>Current areas meeting this criterion are shown in Appendix B</p>
AREAS UNDER ECOLOGICAL RESTORATION	<ul style="list-style-type: none"> Where a management programme has been agreed to by the Council. This could include: <ul style="list-style-type: none"> Parks or reserves eg Titirangi, Waihirere Domain. Coastal dunelands subject to community dune restoration projects eg Wainui Beach, Turihaua Beach. Freshwater environments subject to restoration for fisheries and habitat values eg Uawanui project area, Te Arai River inanga spawning restoration. Restoration projects funded as part of the Natural Heritage Fund of Gisborne District Council eg Te Arai River Loop restoration. Wetlands subject to a Wetland Management Plan. Privately and/or publicly funded restoration projects with significant biodiversity benefits, often involving species re-introductions eg Nick's Head station, Longbush, Whinray Scenic Reserve. Places identified in Iwi or Hapu Environmental Plans/Te Taoio Plans for ecological restoration. <p>Current areas meeting these criteria are shown in Appendix B</p>
AREAS OF CULTURAL OR SOCIAL SIGNIFICANCE	<p>Important areas of social gathering and habitation, or cultural sites including:</p> <ul style="list-style-type: none"> Gisborne City and townships Marae Urupa Waahi tapu Archaeological sites Sites of historic significance identified by the Historic Places Trust Arboretums eg Hackfalls, Eastwoodhill Heritage sites identified in the Gisborne District Plan Sites identified as culturally significant in statutory acknowledgements and statements of association <p>Current areas meeting these criteria are shown in Appendix B</p>

6.5.1 Identification and Prioritisation of Site Led Programme

The prioritisation process for identifying areas for site-led programmes is provided below. This is a two-stage approach, for programmes with a biodiversity focus, an assessment of ecological significance will first be undertaken. If a biodiversity programme meets the ecological significance criteria, then it, together with other proposed site led programmes (for amenity, cultural or economic reasons) will be assessed against the remaining criteria. Site led programmes will be identified annually as part of the Annual Operational Plan.

FOR BIODIVERSITY OUTCOMES

1. The site must meet ONE of the ecological significance criteria below (i.e. Yes/No responses required)

Representativeness: The extent to which an area is typical of the natural diversity of the ecological district.

Threat status and rarity: An area contains a threatened species or threatened ecosystem according to DOC threatened species criteria and IUCN criteria determined threatened ecosystems.

Diversity: An area shows particularly high species diversity reflecting the natural diversity of the ecosystem.

Uniqueness and distinctiveness: the site contains examples of endemism, relict distribution, type locality, distribution limits, unique or specialised features of scientific interest. Based on DOC criteria and local technical knowledge.

Stepping stones, migration pathways and buffers: An area provides a stepping stone between significant sites, acts as a migration pathway for an indigenous species, acts as a buffer to a significant site (that has met one of the other significance criteria).

The site must meet **ALL THREE** of the criteria below. These have been developed to determine the likelihood of success of the project i.e. will the project deliver successful biodiversity outcomes in line with the projects objectives.

Support: The project has the support of the landowner (i.e. Iwi, Private landowner, DOC, GDC) and the community (where relevant e.g. a project of public interest).

Plan: There is a robust management plan in place with measurable, realistic goals and objectives, and methods follow best practice. There may also need to be a risk assessment. (We need to develop guidelines on what a plan should look like and provide support in development of a plan where needed).

Project Sustainability: there is evidence to support the long term success of the project (e.g. the project owners have a proven track record).

The site must rate as **MEDIUM** or **HIGH** for the following criteria.

Financial viability: The projects benefits outweigh the costs i.e. there is a medium to high return on investment. (N.B. Need to consider the impact of NOT controlling pests)

Other considerations for prioritising the site.

Likelihood of additional support from other sources:

- Project is likely to receive support from other agencies such as DOC and QE11 (covenant).
- Project is likely to receive funding from other sources.
- There is the potential for partnerships with other projects, community, agencies.

FOR CULTURAL AMENITY OR ECONOMIC OUTCOMES

1. 1. The site must meet 2, 3 and 4 above.

Reason for Inclusion

Classed as social/amenity, or environmental pests, the pests on the Site Led Programme are capable of causing adverse effects on the values of particular types of important sites as outlined in the Description and Status of each of the pests in the table below. For these species, it is appropriate that GDC regulate for the management of these pests if voluntary action does not effectively manage the unreasonable cost of externality (boundary) effects from neighbours who are not controlling these organisms where Site Led Programmes are being undertaken.

Table 27: Animal Pests on GDC's Site Led Programme²³

FERAL CAT	
DESCRIPTION AND ADVERSE EFFECTS	Females average about 75% of weight of males. Inhabit a wide range of urban, rural and forest habitats. Can be found from sea level to alpine habitats. Cats have 2-3 litters per year with an average of 4 young in each. Diet is wide ranging and includes small mammals, fish, birds and invertebrates. No natural predators.
STATUS	Environmental pest



²³ All other animal pests listed in this Plan and the National Pet Accord may also be included within a Site Led Programme and are subject to the Rules in relation to Site Led animal pests.

FERAL CATTLE

DESCRIPTION AND ADVERSE EFFECTS

Current herds derive from Angus or Hereford stock from neighbouring farmland. Adult males, black and brown in colour stand at about 1.5 metres tall and weigh over 900kg, females, dark, smaller and lighter. Females produce one off spring per year. Providing suitable habitat and food availability, capable of existing in rugged Raukumara Ranges and have done so for the past 90 years. In addition to damaging native flora, feral cattle have the potential to become infected with Bovine TB from other infected feral animals.

STATUS

Environmental pest

FERAL DEER

DESCRIPTION AND ADVERSE EFFECTS

Feral deer range in size and colour, depending upon the species. Generally however, feral deer are various shades of brown. One off-spring produced each year. Feral deer are opportunist and highly adaptable feeders that can browse and graze. In forested areas feral deer can graze and destroy the under story of vegetation. Feral deer, like goats adversely affect indigenous ecosystems through grazing and reduce production by damaging crops and exotic forests. They have been implicated with the spread of Bovine TB in other regions.



STATUS

Environmental pest

FERAL GEESE

DESCRIPTION AND ADVERSE EFFECTS

A large grey or white bird about 2.5-5kg in body weight. The sexes are similar, although the male is larger and juveniles are duller. Lay 5-8 eggs in a ground nest, which takes 30 days to hatch. In large flocks can destroy productive pasture by feeding on grass and leaving areas bare. Their abundant droppings are highly concentrated near feeding sites posing a threat to water quality.



STATUS

Environmental pest

FERAL GOAT²⁴

DESCRIPTION AND ADVERSE EFFECTS

Goats vary in size and colour, adult males weigh between 54-58 kg and have a "block" appearance with stout legs designed for climbing. Females are smaller, both have horns, with males being longer. Inhabit a wide range of habitat from sea level to alpine habitat. Farmland, scrub, native and exotic forests provide suitable habitats. Are capable of conceiving at 6 months of age, producing triplets and breeding twice within any year. The main factor in determining the birth rate seems to be food supply. Goats compete with domestic stock for pasture, can alter the species composition of under-story vegetation. Can remove all vegetation from some sites, and thus resulting in soil instability that can cause silting in streams. Actively graze shrubs and tree bark.



STATUS

Environmental pest

FERAL PIG

DESCRIPTION AND ADVERSE EFFECTS

The size and colour of feral pigs can vary considerably. Boars can reach one metre high and weigh in excess of 180kg. A gregarious animal with family groups of all ages. Free ranging omnivorous opportunistic feeders. Capable of breeding all year round, however majority of litters are born in spring and summer, with litters of up to 10 piglets. Where there is an abundance of food, suitable habitat and no hunting pressure, feral pigs are capable of producing good litters and free range in mobs of mixed age groups. Feral pigs have a habit of rooting for food and damaging pasture, exposing the soil to potential plant pest germination and erosion problems. They can kill new born lambs and cast ewes. They browse on native plants and seedlings, and prey on ground nesting birds. Also implicated in the spread of Bovine TB in other regions.



STATUS

Environmental pest

²⁴ Sustained Control on the Raukumara boundary, Site Led elsewhere.

FERAL PIGEON

DESCRIPTION AND ADVERSE EFFECTS

Adults average 400 grams in weight, thirty three centimetres long and vary in colour, but most are contrasting shades of grey with glossy green, pink and purple neck feathers. Prefer to roost and nest under overhangs on rock ledges, under bridges, concrete building overhangs and ledges. 2-3 broods per year with two eggs in each clutch. Seventeen to nineteen days incubation and spend 35-37 days in the nest. Pigeons can be a threat to human health via their droppings. They also contribute to fouling of public areas as well as causing damage to buildings through direct chemical reaction by their droppings.

STATUS

Social/Amenity pest



FERRET

DESCRIPTION AND ADVERSE EFFECTS

Ferrets are the largest of the three species of mustelids, growing up to 0.5m long. They have a yellow/white undercoat with longer black guard hairs. Stoats are larger than weasels and both are tan in colour. All have a characteristic long body, short legs and pointed faces. Females produce 1 or 2 litters per year, average 6 young, there is high juvenile mortality. Diet is wide ranging and includes small mammals, fish, birds, eggs and invertebrates. Ferrets are known vectors of Bovine TB.

STATUS

Environmental pest



HEDGEHOG

DESCRIPTION AND ADVERSE EFFECTS

Hedgehogs are small, spiny, mainly insectivorous nocturnal animals. Hedgehogs consume large quantities of invertebrates and eggs of ground-nesting birds.

STATUS

Environmental pest



MAGPIE

DESCRIPTION AND ADVERSE EFFECTS

36-44cm in length, weighing 280-340kg. There are 2 species, white-backed and black backed. Produces 2-5 eggs per year. Magpies are extremely territorial and are capable of excluding other birds from their breeding territories. They are omnivorous and hence pose a threat to other small birds (eggs and chicks) and animals.

STATUS

Social/Amenity pest



PEACOCK

DESCRIPTION AND ADVERSE EFFECTS

96-120cm in length, weighing 2.8-6kg. Peacocks are a pest for farmers as they eat pasture and crops. They are grass eaters and seed eaters that spread other weeds e.g. Variegated Thistle

STATUS

Production pest



RAT

DESCRIPTION AND ADVERSE EFFECTS

Norway rats are about 380mm in length of which the tail is about 180mm. Ship rats are more common, have a tail larger than its body. Both species are widely found in areas associated with human activity as well as being common in most bush areas. They are omnivorous eating a wide range of native plants and animals. Norway rats are large enough to kill nesting adult seabirds, and prey on animals that live, roost or nest close to the ground. Ship rats are good climbers and are able to access most bird nests high in trees.



STATUS

Environmental pest

STOAT

DESCRIPTION AND ADVERSE EFFECTS

Stoats are mustelids with a long thin body, smooth pointed head, short round ears and round black eyes. Smaller than ferrets with males growing up to 40cm long. Fur is dark brown with creamy white underparts and a bush black tipped tail. Inhabits a wide range of urban, rural and forest habitats (native and exotic forest). Found from sea level to highest mountains. Diet is wide ranging and includes small mammals, fish, bird and invertebrates



STATUS

Environmental pest

WASP

DESCRIPTION AND ADVERSE EFFECTS

Both wasps are similar in appearance and can be identified by their conspicuous yellow and black colours. Both have a black head and thorax with black stripes on the abdomen. Common wasps are found in most habitats, with highest densities in honeydew beech forests. Both species are found in urban and rural areas. Wasps reduce the amount of food available for native insects and native animals. They also eat huge numbers of native insects. Wasps reduce production by honeybees by competing for honeydew.



STATUS

Environmental and Social/Amenity pest

WEASEL

DESCRIPTION AND ADVERSE EFFECTS

The smallest mustelid – about 20cm long. Fur is brown with white underparts often broken by brown spots. Tail is short, brown and tapering. Prefers agricultural land, scrub and cutover forest habitats. Diet is wide ranging and includes small mammals, fish, bird and invertebrates.



STATUS

Environmental pest

Table 28: Pest plants on GDC's Site Led Programme²⁵

AGAPANTHUS

DESCRIPTION AND ADVERSE EFFECTS

Dense clumps of robust, evergreen leaves <60cm high from bulbs. Light blue or white tubular composite flowers. Agapanthus germinate and spread widely via large quantities of seeds falling and transporting to new sites via streams and rivers to produce new Agapanthus plants. They are a problem for drainage systems by growing in waterways and are a particular problem in coastal locations.



STATUS

Environmental pest

²⁵ All other pest plants listed in this Plan and the National Plant Pest Accord may also be included within a Site Led Programme and are subject to the Rules in relation to Site Led pest plants.

BLUE MORNING GLORY

DESCRIPTION AND ADVERSE EFFECTS

A common, vigorous, climbing perennial vine, with stems and leaves with hairy undersides. Leaves are lobed, uneven in size with distinctive deep blue flowers. Seed capsules are brown and papery and seeds themselves look similar to peppercorns. Viable seeds are rarely formed in New Zealand, but the climber readily grows from stem fragments. The plant can completely shade out canopy species. Spread from garden waste, stem fragments contaminated road gravel.

STATUS

Environmental pest



CHILEAN RHUBARB

DESCRIPTION AND ADVERSE EFFECTS

Summer green herb with massive prickly umbrella-like leaves up to 2 m long. Looks like very large rhubarb. Has large reddish-brown flower spike up to 1 m long, with very small flowers. Small round orange fruit 1.5–2 mm long. Can inhabit coastal cliffs, riparian margins and wetlands. Tolerant of salt spray and a wide range of climatic and soil conditions. Produces huge amounts of viable seed. Each seed head contains over 80,000 seeds. Can also grow from rhizomes. Large spreading leaves shade out other species. In severe winter conditions the plant dies down, but grows new leaves in spring.

STATUS

Environmental pest



COMMON IVY

DESCRIPTION AND ADVERSE EFFECTS

Perennial climber with woody stout stems that become erect at flowering, attaching to whatever is supporting it with aerial rootlets. Hairless dark green or variegated ivory-white leaves (3-15 cm long) are arranged alternately on stems, and are variably). Tiny, insignificant yellowish-green flowers are produced from March to May, followed by purple to black berries (5-8 mm diameter) containing seeds with low viability. Clings to and climbs almost any surface, can grow over forest floor, sub-canopy and canopy to great heights, forming dense, long-lived masses at a moderate to fast growth rate and completely smothering tree trunks and branches. Tolerates cold, damp, wind, salt, differing soil types, shade, damage, and drought.

STATUS

Environmental pest



JAPANESE HONEYSUCKLE

DESCRIPTION AND ADVERSE EFFECTS

A sweet, scented, evergreen, woody rampant, perennial climber, very attractive with sweetly scented, tubular white flowers with oval leaves in opposite pairs. Glossy-black, egg-shaped berries with seeds about 2mm in diameter. Can form dense masses of vegetation that smother and crowd out other vegetation. Birds disperse seeds but discarded fragments of this plant also contribute to further spread.

STATUS

Environmental pest



MEXICAN DAISY

DESCRIPTION AND ADVERSE EFFECTS

Sprawling perennial daisy to 40 cm tall with fibrous roots, and long thin stems (from 15-70 cm long) that are sparsely hairy to hairless, much-branching and root at nodes. Small, narrow leaves are fragrant when crushed. White, white-purplish or pink daisy-like flowers with a central yellow disc are produced from January to December, followed by masses of fluffy seeds. Forms dense mats and produces huge amounts of seed that travel for long distances. Wide ecological versatility, tolerating moderate shade to full sun, damp to drought conditions, sand to mud, almost any surface (tree and fern trunks, loose gravel, and so on), high to low temperatures. Opens habitats up to invasion by vines and other weeds. It replaces vulnerable herbs and shrubs in key and isolated places.

STATUS

Environmental pest



PERIWINKLE

DESCRIPTION AND ADVERSE EFFECTS Prostrate, scrambling perennial with short rhizomes and green, hairless, trailing stems that can grow up to 2+ m long and take root where they come in contact with the soil. Glossy dark green or occasionally variegated (green and white) leaves (4-10 x 3-7 cm) are in opposite pairs on the stem. Solitary, blue-violet, 5-petaled flowers (up to 4-5 cm in diameter) are produced from January to December. Creeping, layering habit allows it to form dense, long-lived stands. Tolerates semi-shade and full sun, salt, most soils, wet or drought conditions, hot and cold temperatures, heavy damage and grazing. Smothers ground in open or shady conditions, prevents the seedlings of native species from establishing, and opening up habitats so that they are more vulnerable to other weeds.



STATUS Environmental pest

PHOENIX PALMS

DESCRIPTION AND ADVERSE EFFECTS Compact, robust evergreen palm <10m tall. Phoenix Palms are transported widely by birds, their germination is prolific and they have fast and vigorous growing rates. Phoenix Palms are bird dispersed and therefore provide a threat to spreading in areas of native bush. The palms provide a habitat for rats and their spikes on the base of its fronds are a health hazard.



STATUS Environmental pest and Social/Amenity pest

PRIVET (CHINESE AND TREE PRIVET)

DESCRIPTION AND ADVERSE EFFECTS Medium sized evergreen tree, growing up to 10m tall (tree privet). Evergreen or semi-deciduous shrub as a small tree up to 5m tall (Chinese Privet). Tree Privet is competitive on a wide range of soils and is shade tolerant. Chinese Privet is also shade tolerant. Both species produce from 100,000 seeds per tree or bush. Seed dispersed by birds. Berries and leaves are poisonous. Pollen of these plants is believed to affect asthma and hay fever sufferers.



STATUS Social/Amenity pest

SMILAX

DESCRIPTION AND ADVERSE EFFECTS A scrambling or twinning perennial vine that grows up to 3m high. The wiry stems arise from white, fleshy tuberous roots. Common in residential gardens, citrus and pip fruit orchards. Birds eat the berries and disperse the seeds, the plant is also spread through careless disposal of garden rubbish. Rapid spread by seed or root dispersal. Able to cover most species blocking their normal growth. Very invasive creeper, a serious garden escape.



STATUS Environmental pest

SWEET BRIAR

DESCRIPTION AND ADVERSE EFFECTS A prickly, woody, deciduous, perennial shrub up to 3m tall, with pink rose like flowers, followed by bright red rose hips. Produces red or orange-red, egg shaped rose hips up to 2cm long, containing many seeds. Seeds are spread via birds and water. Plants may also regrow from root or stem fragments.



STATUS Social/Amenity pest

WILDING CONIFERS

DESCRIPTION AND ADVERSE EFFECTS Introduced conifer trees established by natural means, unless located within a forest plantation. Includes Douglas fir, contorta pine, Scots pine, mountain pine, Bishops pine, maritime pine, ponderosa pine, Corsican pine, European larch, radiate pine. Pines seed efficiently from pine cones. The wind-blown seeds are widely distributed and need no nurturing to take root. They compete for forest space with native trees and plants. But they don't provide any advantages, such as berries and nectar, to encourage bird life and insects. Pine needles form a carpet which discourages regeneration of native forest floor species.



STATUS Environmental pest

YELLOW FLAG IRIS

DESCRIPTION AND ADVERSE EFFECTS Robust aquatic perennial to 1-2 m that grows in leafy clumps and forms dense rhizomes (up to 3 cm diameter). All parts are odourless when crushed. Stems are round, and several long sword-like leaves (1 m x 2-3 cm) emerge in fans from a reddish base. From October to December pale-yellow to golden-orange flowers (up to 12 cm diameter) are produced, followed by seed capsules (5 x 2 cm) containing many brown, flattened, 3-sided to disc-like seeds.



STATUS Environmental pest

6.5.2 Management Regime for Site Led Programme Pests

Table 29: Management Regime for Site Led Programme Animal Pests

MANAGEMENT REGIME FOR SITE LED PROGRAMME ANIMAL PESTS:	
OBJECTIVE	Over the duration of the Plan, control of these animal pests so that the important values of areas of significant indigenous biodiversity, ecological restoration or areas of social and cultural significance are protected from the impacts of these pests.
PRINCIPAL MEASURES	<p>Service delivery Where priority areas of significant biodiversity or areas under ecological restoration occur which meet the criteria outlined in Table 26, and GDC is undertaking service delivery of possum control, these operations will be expanded to include other animal pests where this will protect the important values of those areas. Council may conduct control operations where these pests are affecting high priority sites of social or cultural significance where control by the occupiers would otherwise be difficult. Where fiscal or other external restraints to achieving success prevent this, GDC will work on the highest prioritised sites first.</p> <p>Council inspection GDC staff will conduct searches in areas vulnerable to invasion by these pests where they are likely to significantly impact on the values of areas of significant natural areas.</p> <p>Advocacy and education GDC will carry out programmes to increase public awareness of the roles and responsibilities of occupiers, the programme and the threats posed by these pests. GDC will seek to integrate control of these pests with Crown agencies, conservation and community groups where they are undertaking site led predator/browser control programmes inside, or adjacent to, a possum control operation.</p> <p>Collaboration Council will collaborate with other agencies and land occupier groups, including developing agreements, for the effective management of pests to protect the values of specific sites.</p> <p>Requirement to Act GDC will enforce the rules for these pests as detailed in Table 31.</p>
AIMS	<ul style="list-style-type: none"> All of the areas identified in the District as priority for biodiversity or ecological restoration come under a site led programme which addresses these animal pests by 2025
MONITORING	GDC will monitor environmental outcomes as prescribed in management plans for high-value natural areas prioritized for protection under any regional biodiversity programme. Monitoring and reporting will be in accordance with Section 7 of this Plan
OUTCOMES	<p>Damage to the values of significant native ecosystems is minimised.</p> <p>The diversity of the District's indigenous flora and fauna is protected from loss attributed to these pests.</p> <p>The effectiveness of important ecological restoration programmes is not reduced as a consequence of these pests.</p> <p>The values of important areas of social and cultural significance are not impacted by these pests.</p>

Table 30: Management Regime for Site Led Pest plants

MANAGEMENT REGIME FOR SITE LED PEST PLANTS:	
OBJECTIVE	Over the duration of the Plan, control of these pests will be undertaken so that the environmental and/or social/amenity values of areas where Site Led Programmes are being undertaken are protected from the impacts of these pests
PRINCIPAL MEASURES	<p>Service delivery Where Site Led Programmes which meet the criteria outlined in Table 26 occur, GDC may assist in control operations of these pests, or provide tools for pest control, in situations where the values being protected are very high and control by occupiers would otherwise be difficult</p> <p>Council inspection GDC staff will conduct searches in areas vulnerable to invasion by these pests where they are likely to significantly impact on the identified values of important environmental, social or cultural sites</p> <p>Advocacy and education GDC will carry out programmes to increase public awareness of the roles and responsibilities of occupiers, the programme and the threats posed by these pests. These pests will be incorporated into generic biosecurity advocacy programmes.</p> <p>Requirement to Act GDC will enforce the rules for these pests as detailed in Table 31.</p>
AIMS	<ul style="list-style-type: none"> • All of the areas identified in the District as a high priority for biodiversity, or ecological restoration come under a site led programme which addresses these pest plants impacting on these values by 2025
MONITORING	GDC will monitor environmental outcomes as prescribed in management plans for high-value natural areas prioritized for protection under any regional biodiversity programme. These pests will also be monitored in accordance with Section 7 of this Plan.
OUTCOMES	Damage to the values of significant native ecosystems is minimised. The diversity of the District's indigenous flora and fauna is protected from loss of values caused by these pest plants. The effectiveness of any ecological restoration programme is not reduced as a consequence of these pest plants Important social or cultural sites do not have their values degraded as a consequence of these pest plants.

6.5.3 Specific Rules for Site Led Pests

Table 31: Specific rules for Site Led Pests

RULE	
Good Neighbour Rule 1.20	Where a Site Led Pest Management Programme has been declared, all occupiers shall on a complaints basis, and unless otherwise agreed between the neighbours and an authorised GDC staff member, destroy agapanthus, Chilean rhubarb, common ivy, giant reed, Japanese honeysuckle, phoenix palm, privet, smilax, sweet briar, Mexican daisy and wilding pine on their land within 50m of a boundary with an adjacent property within 21 calendar days of being notified of the presence of the pest, where the adjacent land occupier is controlling these pests on their land.
Good Neighbour Rule 1.21	Where a Site Led Pest Management Programme has been declared, all occupiers shall on a complaints basis, and unless otherwise agreed between the neighbours and an authorised GDC staff member, destroy blue morning glory, periwinkle and yellow flag iris on their land within 10m of a boundary with an adjacent property within 21 calendar days of being notified of the presence of the pest, where the adjacent land occupier is controlling these pests on their land.
Good Neighbour Rule 1.22	Where a Site Led Pest Management Programme has been declared, all occupiers shall on a complaints basis, and unless otherwise agreed between the neighbours and an authorised GDC staff member, control feral cat, feral cattle, feral deer, feral geese, feral pig, feral pigeon, ferret, hedgehog, magpie, peacock, possum, rat, stoat, wasp and weasel, act to significantly reduce the chance of these pests from their property re-infesting the adjacent property. Actions may include direct control, mustering for removal or fencing ²⁶ – as is appropriate to the pest type.
A breach of these rules will create an offence under Section 154 N (19) of the Act. Any person or corporation who fails to comply with this rule is liable to penalties as prescribed under Section 157 (5) of the Act.	

Explanation of Purpose of the Rules

These Rules will ensure that the Objectives of the Site Led Programme and protection of important environmental, cultural and amenity values of key places are met and adverse effects on these important places are prevented.

²⁶ Fences must be maintained. This will be managed in accordance with the Wild Animal Control Act. Fencing requirements for the farming of deer and pigs is also regulated under the Resource Management Act and the Tairāwhiti Plan.

7.0 Monitoring

7.1 Measuring what the objectives are achieving

EXCLUSION PROGRAMME		
ANTICIPATED RESULT	No pests on the exclusion programme establish in the District.	
INDICATOR	None of the pests found in the District.	
METHOD OF MONITORING	FREQUENCY OF MONITORING	FREQUENCY OF REPORTING
Inspection of properties and areas vulnerable to invasion	Annually	Annually
ERADICATION PROGRAMME		
ANTICIPATED RESULT	All known sites and any new sites identified controlled to zero density by 2026.	
INDICATOR	Extent and density of the subject pest in the areas it is being controlled.	
METHOD OF MONITORING	FREQUENCY OF MONITORING	FREQUENCY OF REPORTING
Inspection and surveillance of known sites. Inspection of properties and areas vulnerable to invasion.	Annually for five years after zero-density has been achieved. Bi-annual inspections after that.	Annually
PROGRESSIVE CONTAINMENT PROGRAMME		
ANTICIPATED RESULT	Reduction in extent and density of these pests in the District. Pests do not establish on areas currently uninfested.	
INDICATOR	Extent and density of the subject pest in the areas it is being controlled.	
METHOD OF MONITORING	FREQUENCY OF MONITORING	FREQUENCY OF REPORTING
Inspection and surveillance of known sites. Inspection of properties and areas vulnerable to invasion.	At each known location of the pest. Annually for five years after zero-density has been achieved. Bi-annual inspections after that.	Annually
SUSTAINED CONTROL PROGRAMME		
ANTICIPATED RESULT	Maintenance of possum densities and associated damage at 2015 levels or lower.	
INDICATOR	Possum density trends	
METHOD OF MONITORING	FREQUENCY OF MONITORING	FREQUENCY OF REPORTING
Residual trap catch index (RTCI) or wax tag 7-night bite mark index (BMI) ²⁷	10% of PCAs annually	Annually
ANTICIPATED RESULT	Soil conservation plantings establish effectively	
INDICATOR	Possum browse	
METHOD OF MONITORING	FREQUENCY OF MONITORING	FREQUENCY OF REPORTING
Inspection post planting until fully established	Annually for first 3 years	Annually
ANTICIPATED RESULT	Pastoral and crop losses caused by browsing pests minimised	
INDICATOR	Numbers of requests for service	
METHOD OF MONITORING	FREQUENCY OF MONITORING	FREQUENCY OF REPORTING
Tracked through Council contact centre	Annually	Annually
ANTICIPATED RESULT	Spread of pests across boundaries minimised	
INDICATOR	Numbers of requests for service	
METHOD OF MONITORING	FREQUENCY OF MONITORING	FREQUENCY OF REPORTING
Tracked through Council contact centre	Annually	Annually

²⁷ The RTCI and BMI goals are based on the 5% RTCI, a nationally acknowledged level of control which allows biodiversity values to be protected.

SITE LED PROGRAMMES

ANTICIPATED RESULT Impacts on diversity of flora, fauna and the values of significant native ecosystems are minimised.

INDICATOR As set out in the management plan for the site led programme

METHOD OF MONITORING	FREQUENCY OF MONITORING	FREQUENCY OF REPORTING
As set out in the management plan for the site led programme	As set out in the management plan for the site led programme	Annually

7.1.1 Compliance monitoring

Monitoring will be undertaken to establish whether, and to what degree occupiers, plant nurseries, and plant and pest retail outlets, stakeholders and members of the public are meeting the requirements of the Plan.

- Inspections of plant nurseries, pet shops and retail outlets will be undertaken to ensure no pest plant or animals are being propagated, sold or offered for sale. Inspections will search for pests banned under this Plan, the National Pest Plant Accord List and the National Pet Pest Accord List. Site visits will be recorded along with actions taken.
- Complaints will be responded to in all instances and where required a property inspection will be undertaken. All complaints will be logged through the Council Request for Service (RFS) system along with the outcome and response.
- Roadside and rail verges will be inspected for plant pest infestations at least once a year. These will be recorded and contact with roading authorities logged with dates of control and other actions recorded.

7.1.2 Monitoring the Council's performance as management agency

Gisborne District Council is the management agency. As the management agency responsible for implementing the Plan, the Gisborne District Council will:

- prepare an operational plan within three months of the Plan being approved;
- review the operational plan, and amend it if needed;
- report on the operational plan each year, within five months after the end of each financial year;
- maintain up-to-date databases of complaints, pest levels and densities, and responses from GDC and land owners and/or occupiers.

7.1.3 Monitoring plan effectiveness

Monitoring the effects of the Plan will ensure that it continues to achieve its purpose. It will also check that relevant circumstances have not changed to such an extent that the Plan requires review. A review may be needed if:

- the Act is changed, and a review is needed to ensure that the Plan is not inconsistent with the Act;
- other harmful organisms create, or have the potential to create, problems that can be resolved by including those organisms in the Plan;
- monitoring shows the problems from pests or other organisms to be controlled (as covered by the Plan) have changed significantly; or
- circumstances change so significantly that [organisation] believes a review is appropriate

If the Plan does not need to be reviewed under such circumstances, it will be reviewed in line with s100D of the Act. Such a review may extend, amend or revoke the Plan, or leave it unchanged.

The procedures to review the Plan will include officers of Gisborne District Council

- assessing the efficiency and effectiveness of the principal measures (specified for each pest and other organism (or pest group or organisms) to be controlled to achieve the objectives of the Plan;
- assessing the impact the pest or organism (covered by the Plan) has on the District and any other harmful organisms that should be considered for inclusion in the Plan; and
- liaising with the Department of Conservation, Nga Whenua Rahui, QEII National Trust, iwi and key interest groups on the effectiveness of the Plan.

8.0 Powers conferred

8.1 Powers under Part 6 of the Act

The Principal Officer (Chief Executive) of Gisborne District Council may appoint authorised persons to exercise the functions, powers and duties under the Act in relation to a RPMP.

Gisborne District Council will use those statutory powers of Part 6 of the Act as shown in Table 33 where necessary, to help implement this Plan.

Table 28: Powers from Part 6 to be used

ADMINISTRATIVE PROVISIONS	BIOSECURITY ACT REFERENCE
The appointment of authorised and accredited persons	Section 103(3) & (7)
Delegation to authorised persons	Section 105
Power to require assistance	Section 106
Power of inspections and duties	Section 109, 110 & 112
Power to record information	Section 113
General powers	Section 114 & 114A
Use of dogs and devices	Section 115
Power to seize abandoned goods	Section 119
Power to intercept risk goods	Section 120
Power to examine organisms	Section 121
Power to give directions	Section 122
Power to act on default	Section 128
Liens	Section 129
Declaration of restricted areas	Section 130
Declaration of controlled areas	Section 131
Options for cost recovery	Section 135
Failure to pay	Section 136

Note: Gisborne District Council's Enforcement Manual sets out the procedures the Council will follow when land owners and/or occupiers or other persons do not comply with the rules or other general duties.

8.2 Powers under other sections of the Act

A land owner and/or occupier or any person in breach of a plan rule creates an offence under s154N(19) of the Act, where the rule provides for this. Gisborne District Council can seek prosecution under s157(5) of the Act for those offences.

A Chief Technical Officer (employed under the State Sector Act 1988) may appoint authorised people to implement other biosecurity law considered necessary. One example is where restrictions on selling, propagating and distributing pests (under s52 and s53 of the Act) must be enforced. Another example is where owners and/or occupiers of land are asked for information (under s43 of the Act).

8.3 Power to issue exemptions to plan rules

Any land owner and/or occupier or other person may write to Gisborne District Council to seek an exemption from any provision of a plan rule set out in Part Two of the RPMP. However, a rule may state that no exemptions will be considered, or it may limit the circumstances to which exemptions apply (eg, scientific purposes).

The requirements in s98 of the Act must be met for a person to be granted an exemption.

Gisborne District Council will keep and maintain a register that records the number and nature of exemptions granted. The public will be able to inspect this register during business hours.

9.0 Funding

9.1 Introduction

The Act requires that funding is thoroughly examined. For a Proposal, this includes:

- analysing the costs and benefits of the plan and any reasonable alternative measures;
- noting how much any person will likely benefit from the plan;
- noting how any person's actions or inactions may contribute to creating, continuing or making worse the problems that the plan proposes to resolve;
- noting the reason for allocating costs; and
- noting whether any unusual administrative problems or costs are expected in recovering the costs from any person who is required to pay.

This analysis has been undertaken in the companion cost-benefit analysis contained in a separate document and is summarized below.

9.2 Summary of Analysis of benefits and costs

The benefits and costs are shown and summarised in the table below. A full analysis of Benefits and costs is included in the companion cost-benefit analysis document.

Table 34: Summary of costs and benefits

OPTION	COSTS	BENEFITS
EXCLUSION PROGRAMME ANIMAL PESTS		
Preferred Option (Exclusion Programme)	20,000 per annum	Protection of production, biodiversity, soil and water and amenity values in the District from these pests.
Option 2 (Not included in Plan)	Moderate Production impacts. Major biodiversity impacts Moderate soil and water impacts Moderate amenity impacts	Direct financial savings of \$20,000 per annum.
EXCLUSION PROGRAMME ENVIRONMENTAL PLANT PESTS		
Preferred Option (Exclusion Programme)	\$25,000 per annum	Protection of production, biodiversity, soil and water and amenity values in the District from these pests.
Option 2 (Not included in Plan)	Minor-moderate Production impacts Major biodiversity impacts Moderate – Major soil and water impacts Moderate-major amenity/nuisance impact	Direct financial savings of \$25,000 per annum.
EXCLUSION PROGRAMME PRODUCTION PLANT PESTS		
Preferred Option (Exclusion Programme)	\$25,000 per annum	Protection of production, biodiversity, soil and water and amenity values in the District from these pests.
Option 2 (Not included in Plan)	Major Production impacts Major biodiversity impacts Minor soil and water impacts Minor amenity/nuisance impacts	Direct financial savings of \$25,000 per annum.
ERADICATION PROGRAMME ANIMAL PESTS (ROOK, MEDITERRANEAN FANWORM)		
Preferred Option (Eradication Programme)	\$55,000 per annum	Protection of production, biodiversity, soil and water and amenity values in the District from these pests.
Option 2 (Not included in Plan)	Major Production impacts Major biodiversity impacts Minor soil and water impacts Minor amenity/nuisance impacts	Direct financial savings of \$55,000 per annum.

ERADICATION PROGRAMME PLANT PESTS		
Preferred Option (Eradication Programme)	\$75,000 per annum	Protection of production, biodiversity, soil and water and amenity values in the District from these pests.
Option 2 (Not included in Plan)	Major Production impacts Major biodiversity impacts Minor soil and water impacts Minor amenity/nuisance impacts	Direct financial savings of \$75,000 per annum
PROGRESSIVE CONTAINMENT PLANT PESTS		
Preferred Option (Progressive Containment Programme)	\$100,000 per annum	Protection of production, biodiversity, soil and water and amenity values in the District from these pests. Benefits to the productive sector of the region of \$3.245 million over the 10 year period of the Plan
Option 2 (Not included in Plan)	Major Production impacts. Major biodiversity impacts Moderate soil and water impacts Moderate amenity impacts	Direct financial savings of \$100,000 per annum
SUSTAINED CONTROL PROGRAMME ANIMAL PESTS (POSSUM, HARE, GOAT AND PEST ANTS)		
Preferred Option (Sustained Control Programme)	\$480,000 per annum	Protection of production, biodiversity, soil and water and amenity values in the District from these pests.
Option 2 (Not included in Plan)	Between \$2,336,000 and \$6,090,000 per annum in economic losses to production land in relation to possums. Major biodiversity impacts Minor - moderate soil and water impacts Minor - Moderate amenity impacts	Direct financial savings of \$480,000 per annum
SUSTAINED CONTROL PROGRAMME PLANT PESTS		
Preferred Option (Sustained Control Programme)	\$55,000 per annum	Protection of production, biodiversity, soil and water and amenity values in the District from these pests.
Option 2 (Not included in Plan)	Moderate Production impacts. Moderate biodiversity impacts Minor soil and water impacts Minor amenity impacts	Direct financial savings of \$55,000 per annum
SITE LED PROGRAMME PESTS		
Preferred Option (Site Led Programme)	\$200,000 per annum	Protection of the values of important biodiversity, ecological restoration, social and cultural sites in the district from pests.
Option 2 (Not included in Plan)	Minor Production impacts. Major biodiversity impacts Minor soil and water impacts Moderate amenity impacts	Direct financial savings of \$200,000 per annum

9.3 Beneficiaries and exacerbators

Beneficiaries are people, institutions or activities that, under the RPMP, will experience lower costs, higher production or the benefits of a healthier natural environment and protection of social and cultural values of places. Beneficiaries include the “Regional Community” who benefit from non-financial gains from pest control such as protection of biodiversity, soil, water, recreational, social and cultural values.

Exacerbators are people, institutions or activities that through their actions – or inaction, contribute to the creation, continuance or worsening of a pest problem. Exacerbators may include public entities such as Crown agencies, Gisborne District Council or private individuals or companies.

Beneficiaries and exacerbators are expected to share the cost of implementing the Plan. Crown agencies are also beneficiaries and exacerbators. However they do not pay rates, and the focus of their involvement in plant and animal pest management is on their own land to achieve their own management objectives, alongside the requirement to meet Good Neighbour Rules outlined in this Plan.

Table 35 below is an assessment of the groups of people who contribute to the pest problem (exacerbators) and those who benefit from the control of pests (beneficiaries).

Table 35: Summary of beneficiaries and exacerbators

PRODUCTION PEST ANIMALS EXCLUDING POSSUMS	
BENEFICIARIES	The associated annual monitoring, reporting and enforcement associated with pest animals is of regional benefit. By keeping pests out of the District, containing, sustaining control and preventing their spread to levels where they cause economic losses, benefits the regional economy. The regional community also benefits from the ancillary protection from the environmental and amenity effects of these pests. Pastoral farmers, growers and foresters benefit as a result of protecting the productive capacity and other features of their property
EXACERBATORS	Landowners and occupiers (including Crown agencies) who are not controlling these pests are the main exacerbators. Persons who knowingly liberate these pests are also exacerbators.
POSSUMS	
BENEFICIARIES	The regional community benefits from the sustained control of possums through benefits to biodiversity and the regional economy. Pastoral farmers, growers and foresters benefit as a result of protecting the productive capacity and other features of their property.
EXACERBATORS	Landowners and occupiers (including Crown agencies) are persons who harbor and knowingly liberate possums are the main exacerbators.
PRODUCTION PEST PLANTS	
BENEFICIARIES	Pastoral farmers, growers and foresters are the main beneficiaries of the management of production pest plants. The pest management programmes in this Plan benefits the Regional economy.
EXACERBATORS	Landowners and occupiers (including Crown agencies) who do not undertake management of these pests are the main exacerbators. Persons who knowingly propagate and spread these pests are also exacerbators.
ENVIRONMENTAL AND AMENITY PESTS	
BENEFICIARIES	The regional community benefits through the protection of regional environmental and social/cultural values
EXACERBATORS	Landowners and occupiers (including Crown agencies) who do not undertake management of these pests are the main exacerbators. Persons who knowingly propagate and spread these pests are also exacerbators.

9.4 Funding sources and reasons for funding

The Biosecurity Act 1993 and the Local Government (Rating) Act 2002 require that funding is sought from:

- people who have an interest in the Plan;
- those who benefit from the Plan; and
- those who contribute to the pest problem.

Funding must be sought in a way that reflects economic efficiency and equity. Those seeking funds should also target those funding the Plan and the costs of collecting funding.

These factors lead the council to consider that overall the beneficiaries of the biosecurity activity are spread across the District. While in the past predominantly the activity has been funded by the rural community, this Plan and the programmes proposed reflect a shift which recognises that the Regional Community are significant beneficiaries and the funding sources are proposed to be reviewed to reflect this. This funding review is being undertaken as part of the 2018-2028 Long Term Plan. Generally however it is proposed that Environmental and Amenity Pest Management should be funded district wide from a general rate and that Production Pest Management should also have a significant contribution from a general rate.

Proposed splits for consideration as part of the Funding Review are as follows:

Production pest plants and animals	40% General Rate, 60% Targeted Rate on rural landowners
Environmental and amenity pests	100% General Rate

Based on preliminary rates modelling using , this change would see, based on the 2016/2017 funding, \$727,000 per annum moves to a General Rate, with \$448,000 per annum remaining a target rate on land value on the DRA 2, 3, 4 and 5 rating areas. As a result of this 21% of the properties in the district will have a decrease in biosecurity rate – of which 82% are in the rural areas. A further 2600 properties, of which 94% are in the urban area, will have increases in their biosecurity rate.

These rates will be set and assessed under the Local Government (Rating) Act 2002, and in determining this, the Gisborne District Council has had regard to those matters outlined in Section 100T of the Biosecurity Act.

It is acknowledged that there are alternative funding streams to rates, for example, private sector partnerships and central government funding. Additional funding from these alternative streams would better enable GDC to enable the outcomes sought in this Plan – particularly as relates to the site led programme.

9.5 Anticipated costs of implementing the Plan

The anticipated costs of implementing the RPMP reflect a best estimate of expenditure levels. Funding levels will be further examined and set during subsequent Long Term Plan and Annual Plan processes. While community funding is mainly sourced from rates, alternative funding sources will be sought by the Gisborne District Council. Such funds will offset rates or be used as a value-added component in appropriate circumstances.

The proposed funding based on the 2016-2017 budget allocation is as follows:

Table 31. Proposed funding for Regional Pest Management Plan

ACTIVITY	EXPENDITURE
Production Pest Management	\$727,000
Environmental & Amenity Pest Management	\$448,000
Total Biosecurity	\$1,175,000

Appendix A – Acronyms and Glossary

Acronyms

BMI	Bite Mark Index
CMS	Conservation Management Strategy
DOC	Department of Conservation
GNR	Good Neighbour Rule
LGA	Local Government Act 2002
LINZ	Land Information New Zealand
LTP	Long Term Plan
MOU	Memorandum of Understanding
NPD	National Policy Direction
NZTA	New Zealand Transport Agency
RMA	Resource Management Act 1991
RPMP	Regional Pest Management Plan
RTCI	Residual Trap Catch Index

Glossary

Active Management Area

Active Management Areas are those where the Council will undertake more intensive monitoring and if required may undertake service delivery to ensure action to ensure that the Progressive Containment outcome is achieved.

Bite Mark Index (BMI)

Bite Mark Index (BMI) is a standardised method for estimating relative densities of possums. BMI is the percentage of WaxTags® which recorded possum interference on each WaxTag® line. This is calculated as a mean figure with associated statistics such as range and confidence limits.

Feral cat

Feral cats are cats without a collar/harness or microchip that are found outside the Gisborne urban area or a rural township. They have none of their needs provided by humans and survive by hunting their food.

Generic biosecurity advocacy programmes

These are multi species plant and animal pest advocacy and education programmes aimed at raising awareness of pests, why they are a problem and methods of effective control.

Infestation

The presence of pest animals or pest plants in a place where they cause damage.

Modified McClean Scale 2012

The scale is the tool councils use to determine rabbit abundance in their regulatory role of ensuring landowners control rabbit numbers to required levels. The scale was adopted by the

New Zealand Rabbit Coordination Group, on 12th October 2012.

1. No sign found. No rabbits seen.
2. Very infrequent sign present. Unlikely to see rabbits.
3. Pellet heaps spaced 10m or more apart on average. Odd rabbits seen; sign and some pellet heaps showing up.
4. Pellet heaps spaced between 5m and 10m apart on average. Pockets of rabbits; sign and fresh burrows very noticeable.
5. Pellet heaps spaced 5m or less apart on average. Infestation spreading out from heavy pockets.
6. Sign very frequent with pellet heaps often less than 5m apart over the whole area. Rabbits may be seen over the whole area.

7. Sign very frequent with 2-3 pellet heaps often less than 5m apart over the whole area. Rabbits may be seen in large numbers over the whole area.
8. Sign very frequent with 3 or more pellet heaps often less than 5m apart over the whole area. Rabbits likely to be seen in large numbers over the whole area.

Organisms

The different types of pest plant and pest animals outlined in this plan.

Progressive Containment Area

The Progressive Containment Area is that area where the pest is currently found and that a key objective of its management is to limit the pest to that area.

Residual Trap Catch Index (RTCI)

Residual trap catch index (RTCI) is a standardised method for estimating relative densities of possums. RTCI is the percentage of trap-nights in which a possum was captured. By estimating RTCI before and after a possum control operation it is possible to estimate the percentage kill rate with associated confidence intervals.

Rookeries

A breeding colony of rooks, typically seen as a collection of nests high in a clump of trees.

Wilding conifer

Any introduced conifer tree, including (but not limited to) any of the species listed in Table a, established by natural means, unless it is located within a forest plantation or shelterbelt, and does not create any greater risk of wilding conifer spread to adjacent or nearby land than the forest plantation or shelterbelt that it is a part of.

For the purposes of this definition, a forest plantation is an area of 1 hectare or more of predominantly planted trees.

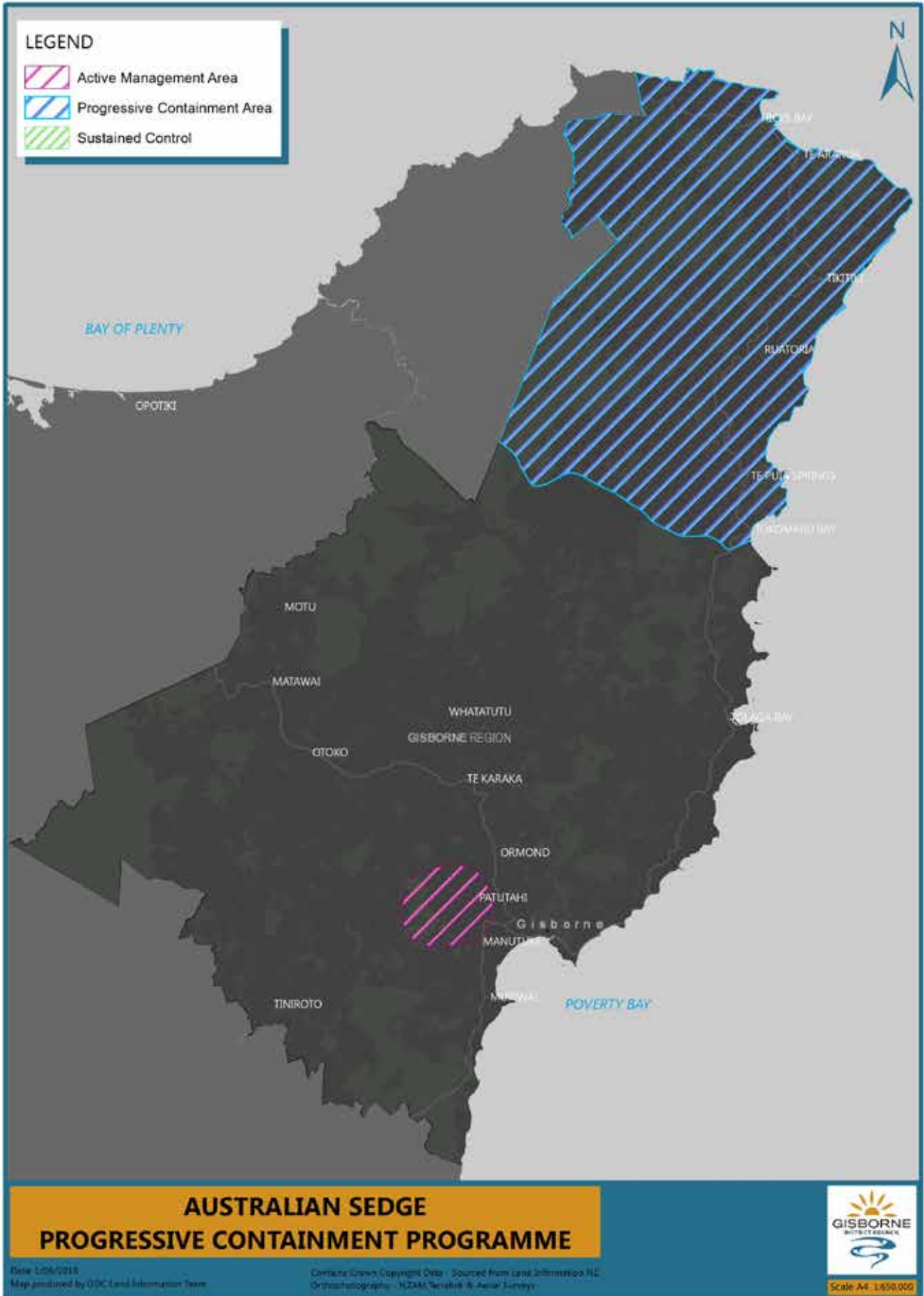
Table A

COMMON NAME	SCIENTIFIC NAME
Douglas fir	<i>Pseudotsuga menziesii</i>
Lodgepole or contorta pine	<i>Pinus contorta</i>
Scots pine	<i>Pinus sylvestris</i>
Dwarf mountain pine and mountain pine	<i>Pinus mugo</i> and <i>P.unicinata</i>
Bishops pine	<i>Pinus muricata</i>
Maritime pine	<i>Pinus pinaster</i>
Ponderosa pine	<i>Pinus ponderosa</i>
Corsican pine	<i>Pinus nigra</i>
European larch	<i>Larix decidua</i>
Radiata Pine	<i>Pinus radiata</i>




Zero-density

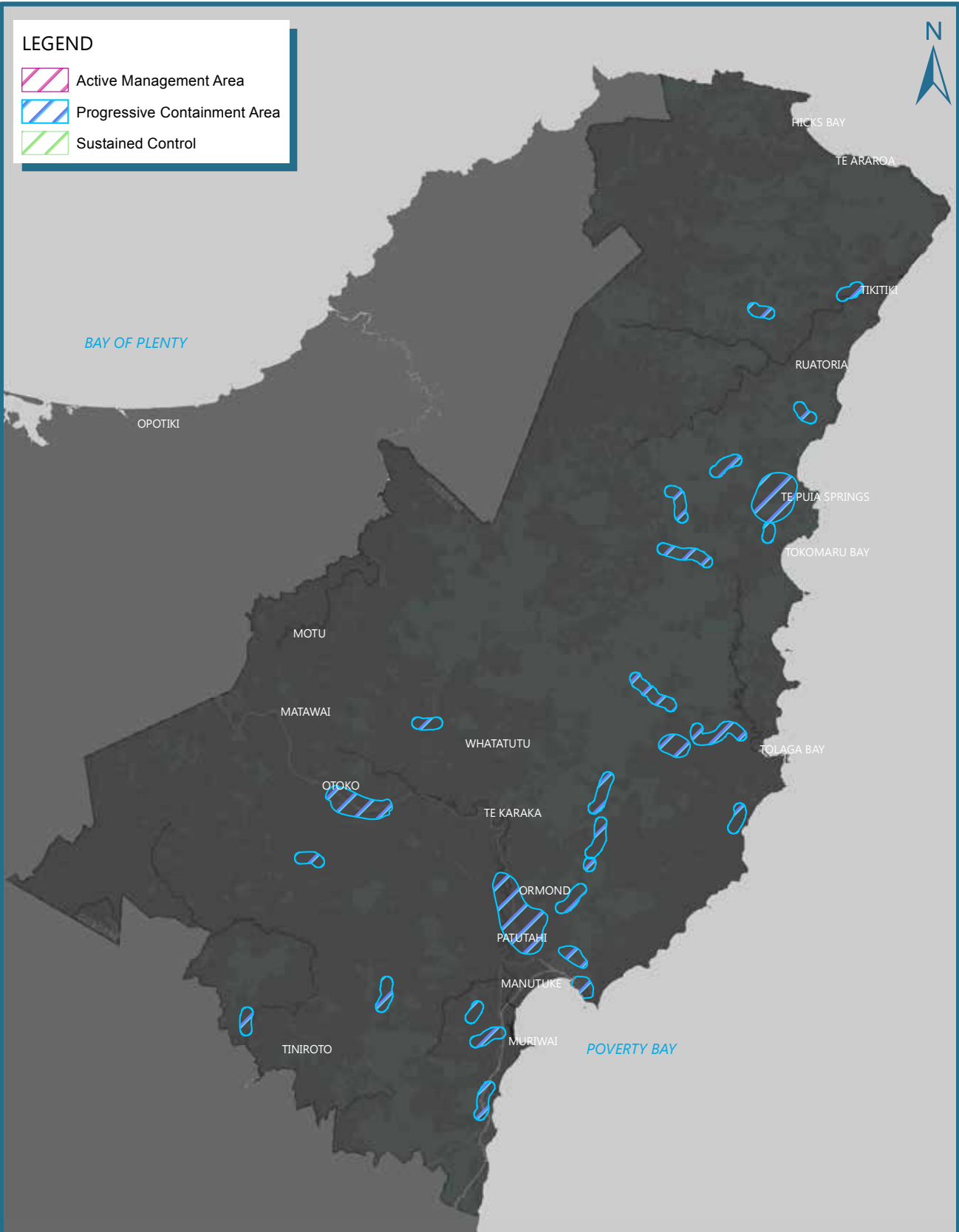
Where all individuals of the plant are destroyed across the entire region.

Appendix B – Maps



LEGEND

-  Active Management Area
-  Progressive Containment Area
-  Sustained Control



**BANANA PASSIONFRUIT
PROGRESSIVE CONTAINMENT PROGRAMME**



Date: 14/06/2017
Map produced by GDC Land Information Team

Contains Crown Copyright Data - Sourced from Land Information NZ
Orthophotography - NZAM, Terralink & Aerial Surveys

Scale A4 1:650,000



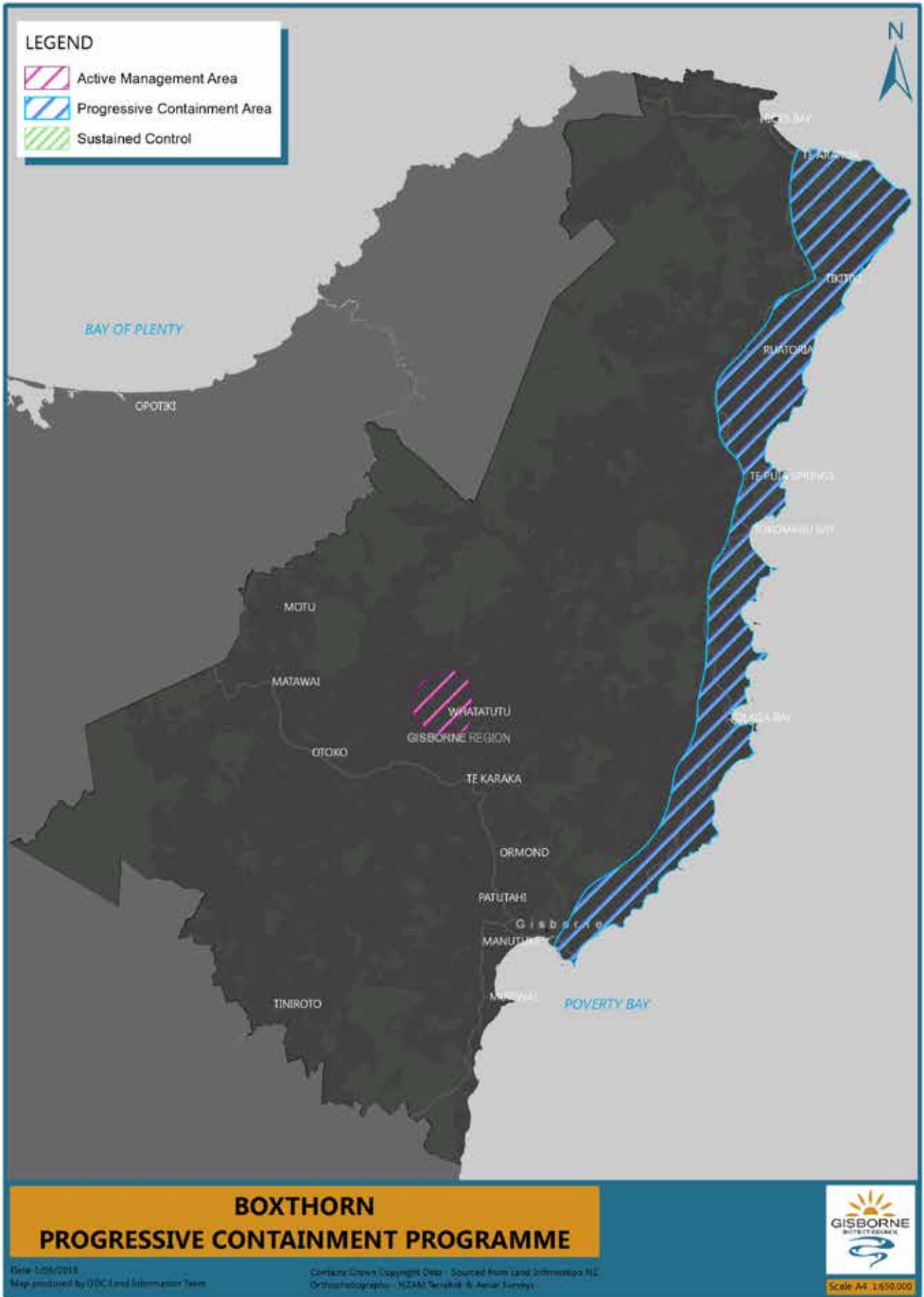
**BONESEED
PROGRESSIVE CONTAINMENT PROGRAMME**

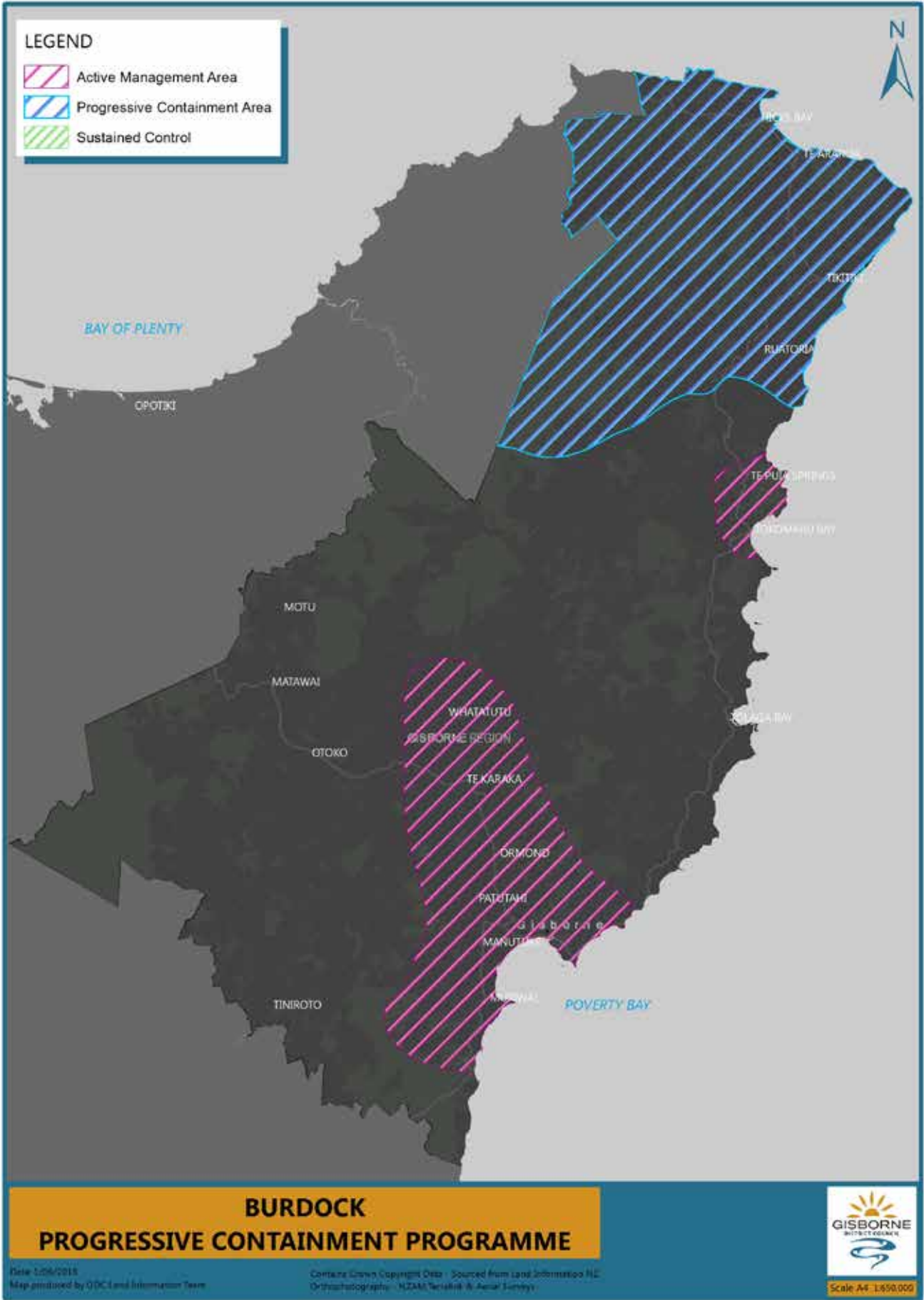


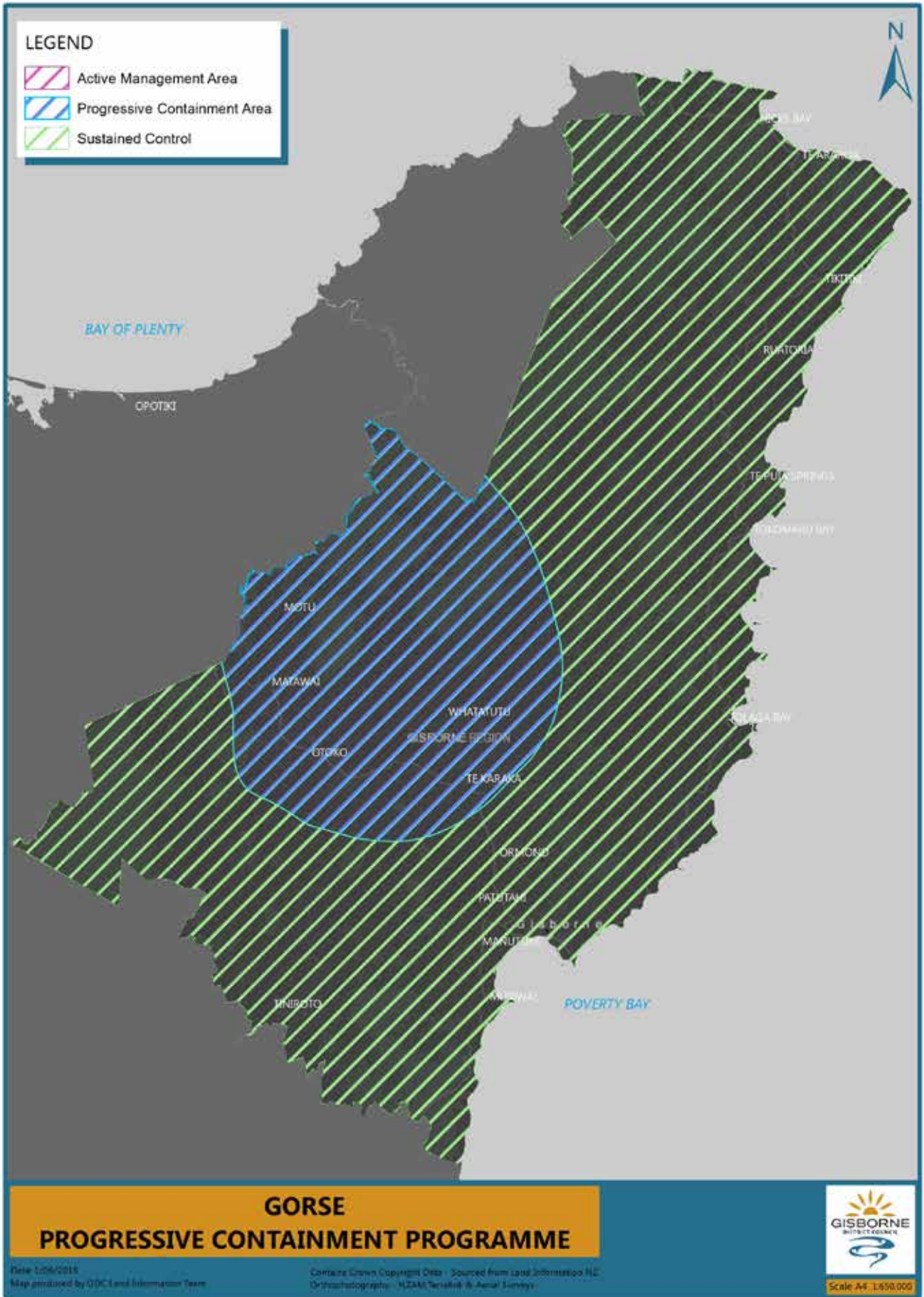
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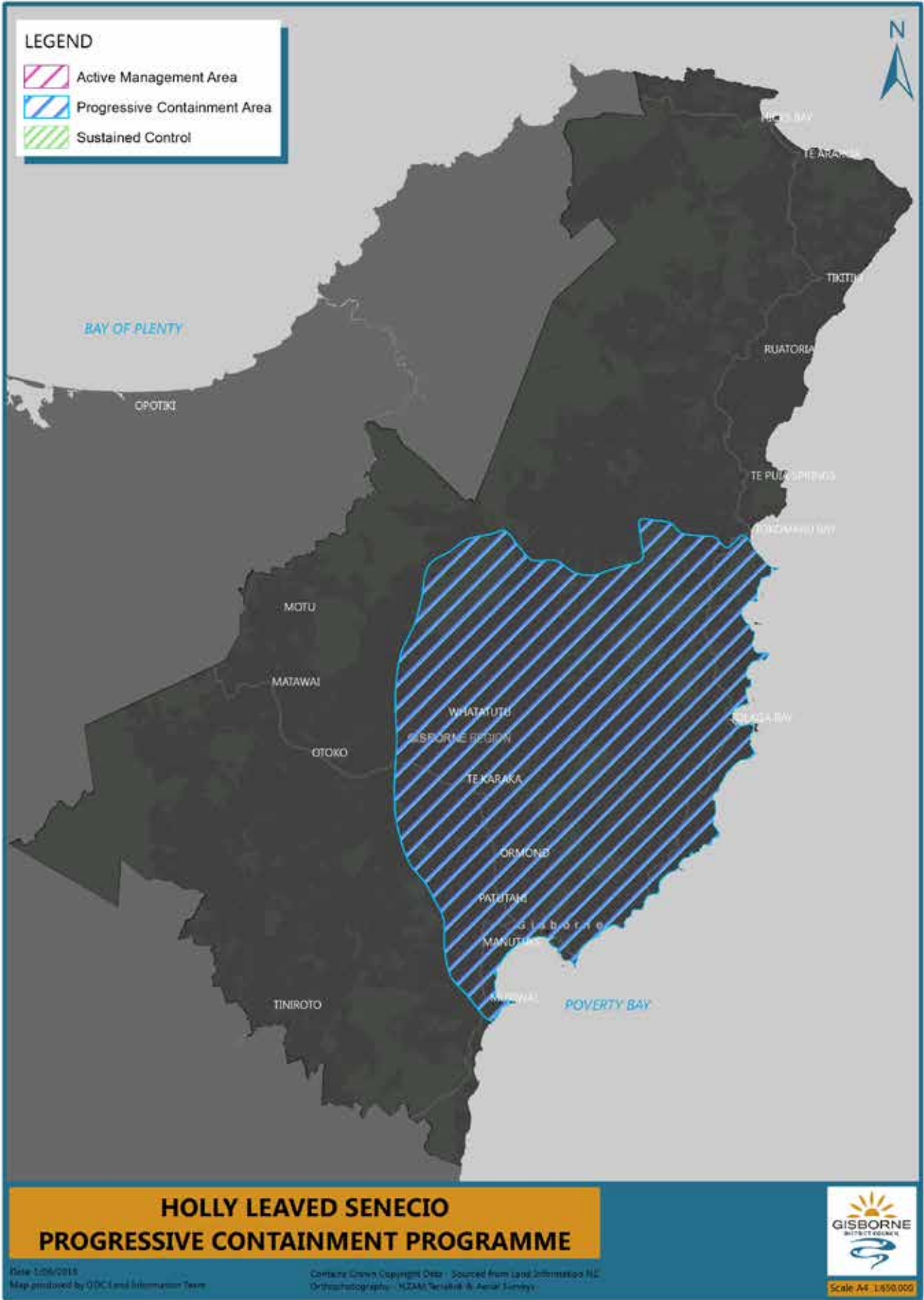
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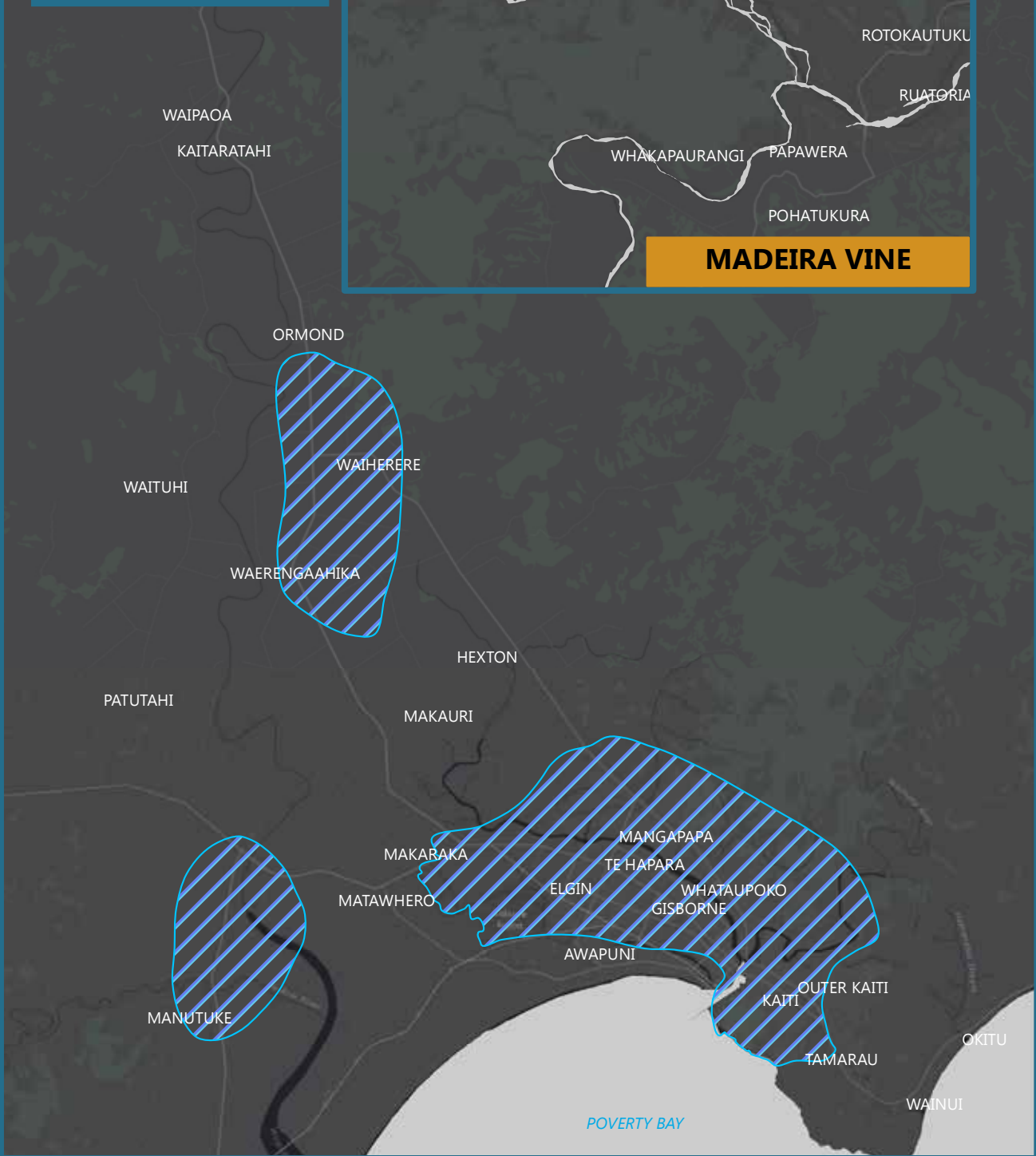






LEGEND

-  Active Management Area
-  Progressive Containment Area
-  Sustained Control



**MADEIRA VINE
PROGRESSIVE CONTAINMENT PROGRAMME**






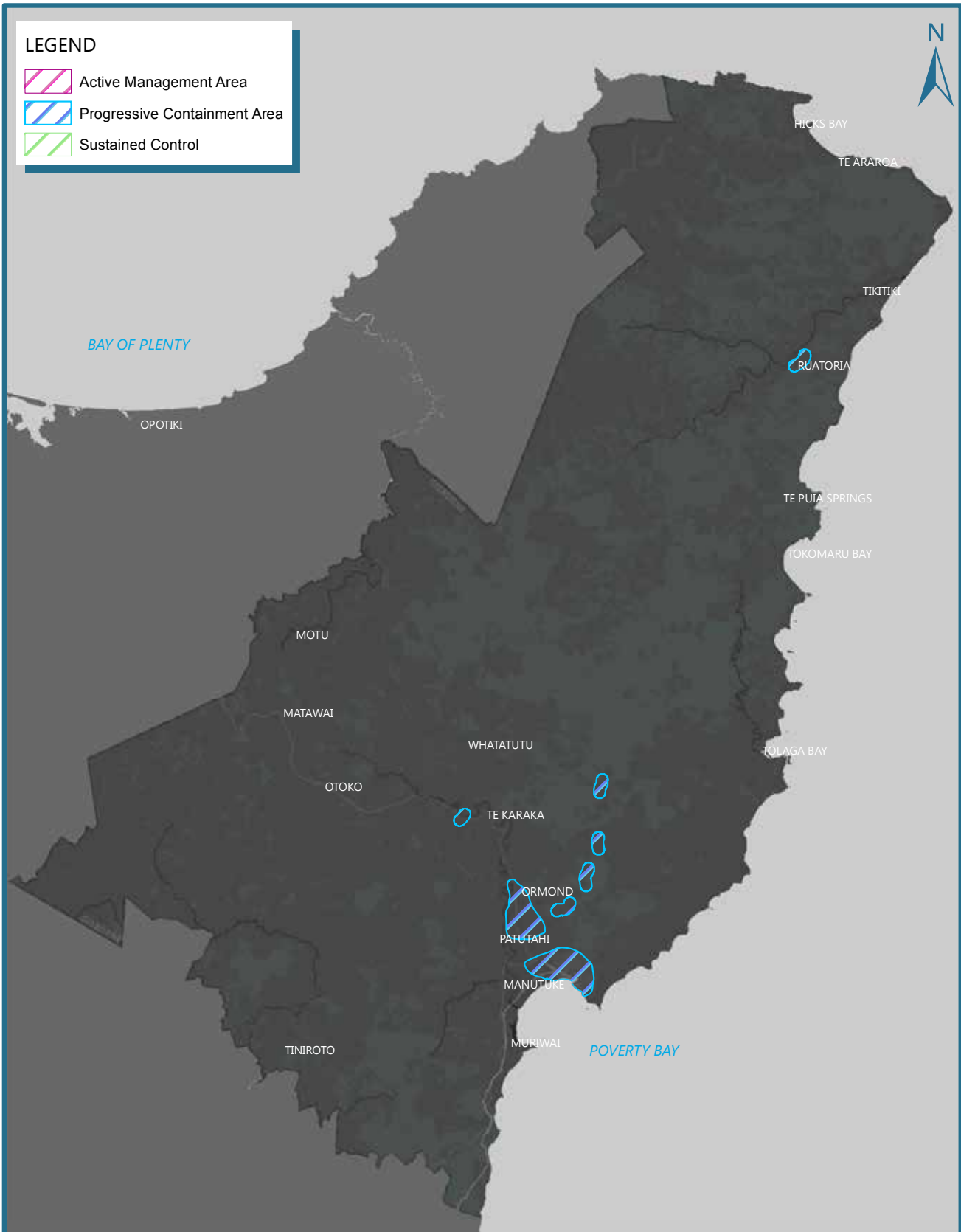
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LEGEND

-  Active Management Area
-  Progressive Containment Area
-  Sustained Control



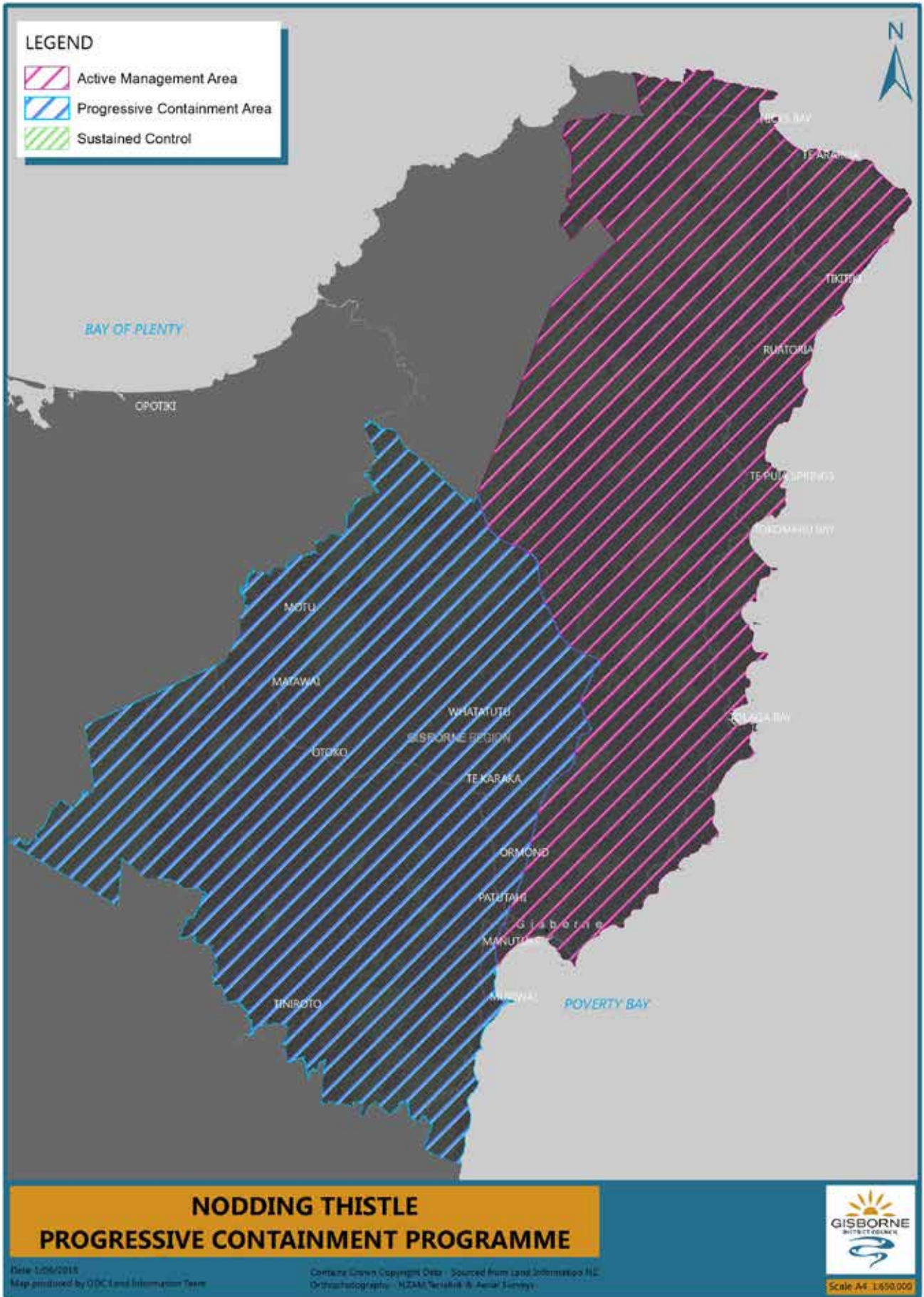
**MOTH PLANT
PROGRESSIVE CONTAINMENT PROGRAMME**






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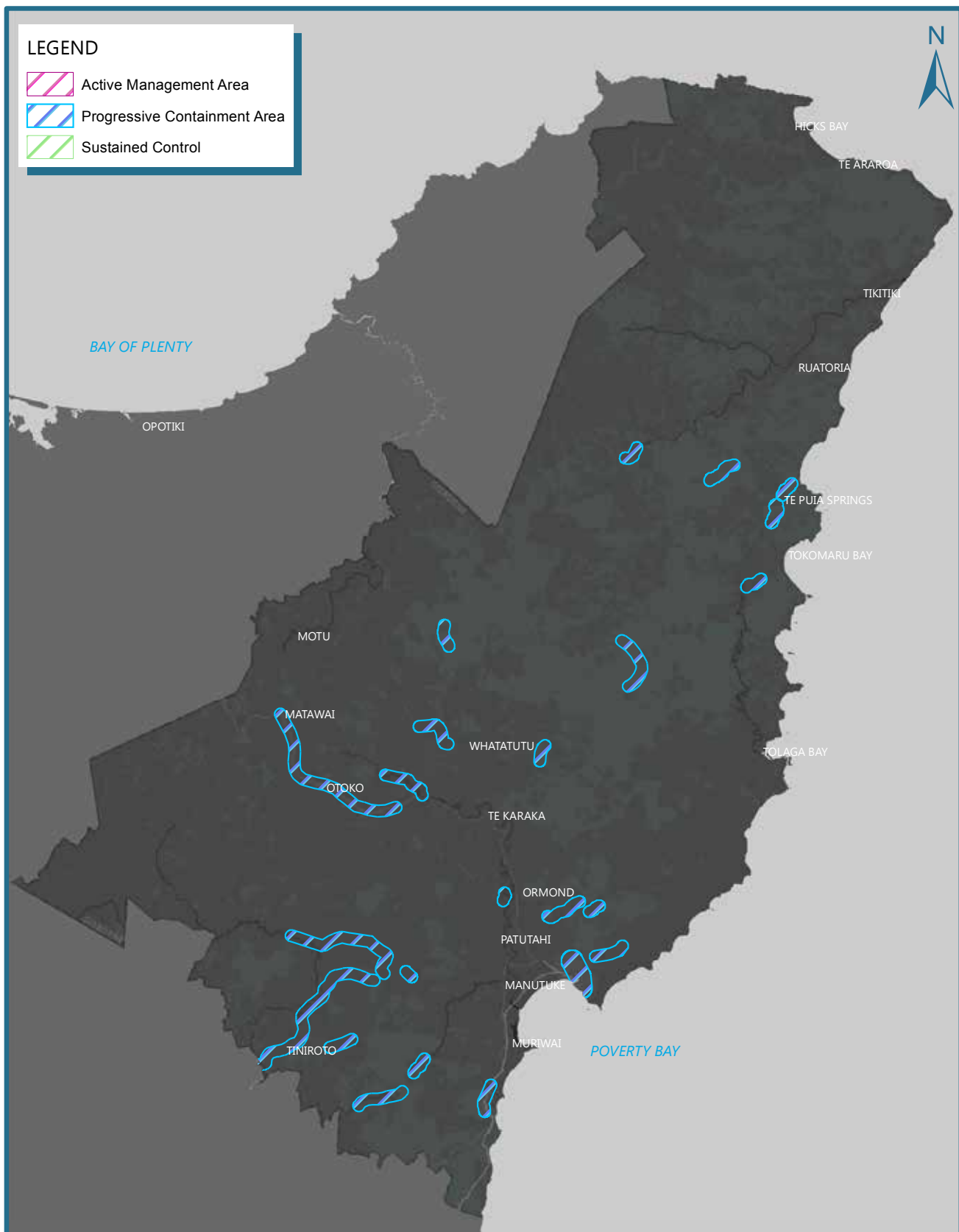
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LEGEND

-  Active Management Area
-  Progressive Containment Area
-  Sustained Control



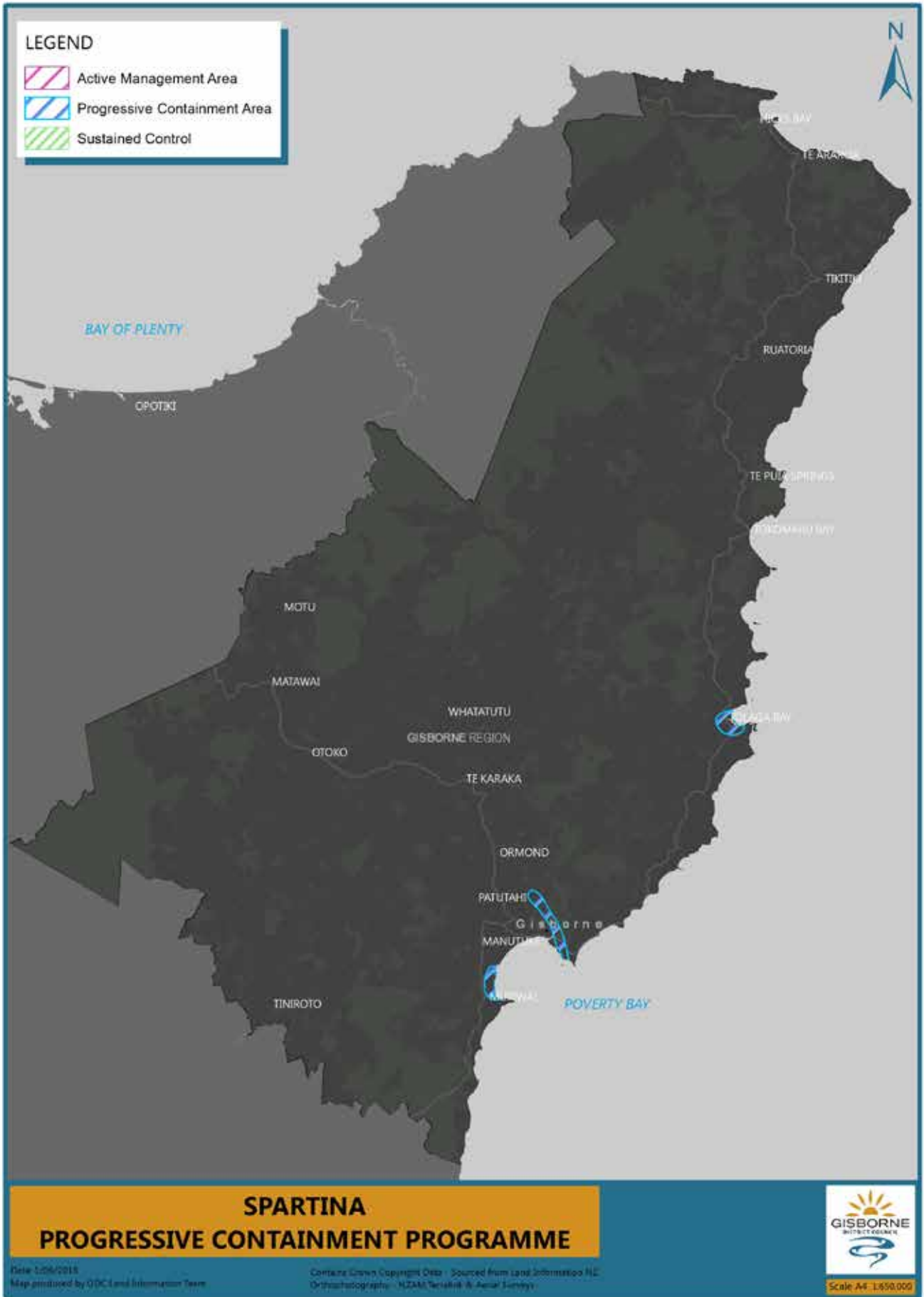
**OLD MAN'S BEARD
PROGRESSIVE CONTAINMENT PROGRAMME**






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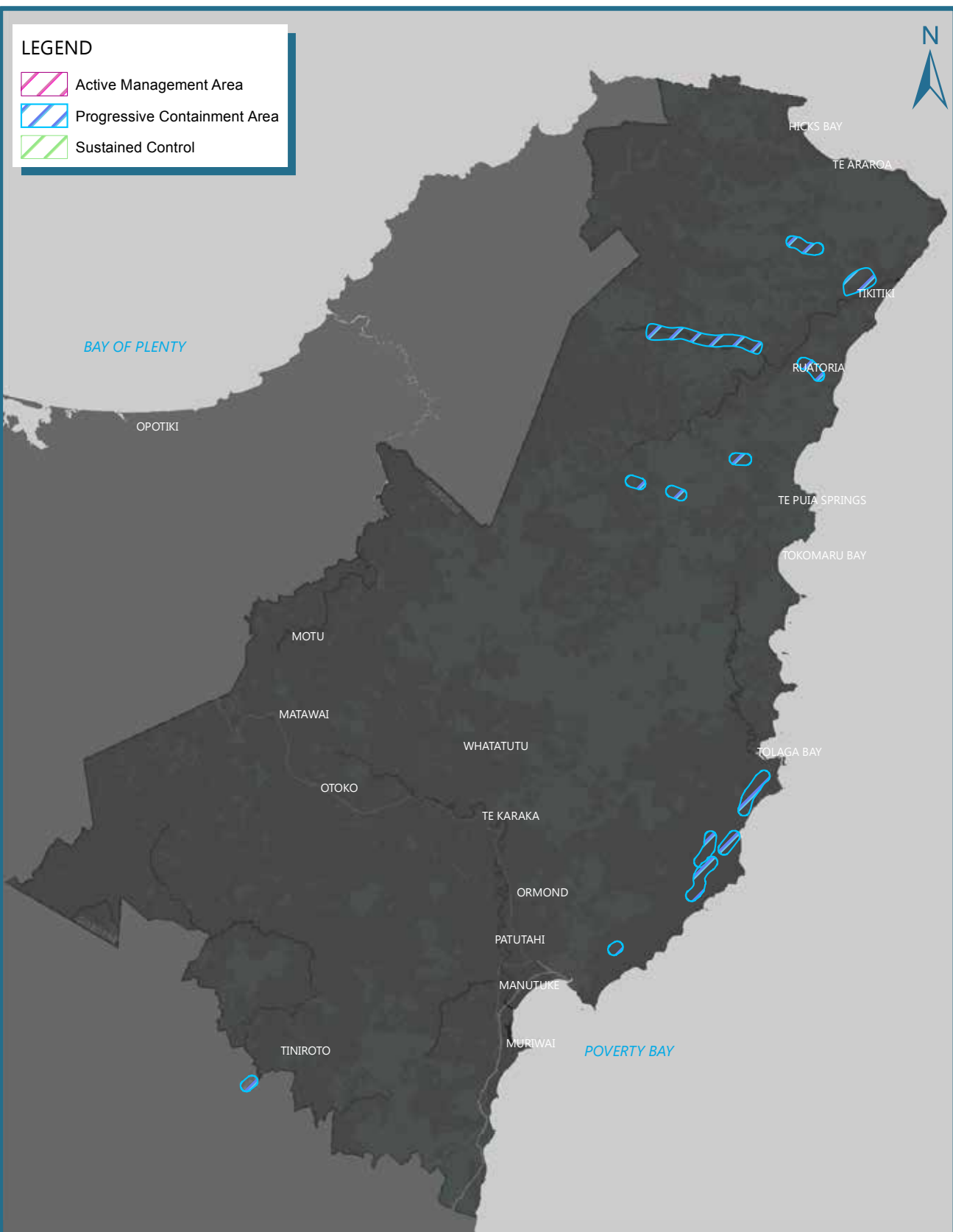
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LEGEND

-  Active Management Area
-  Progressive Containment Area
-  Sustained Control



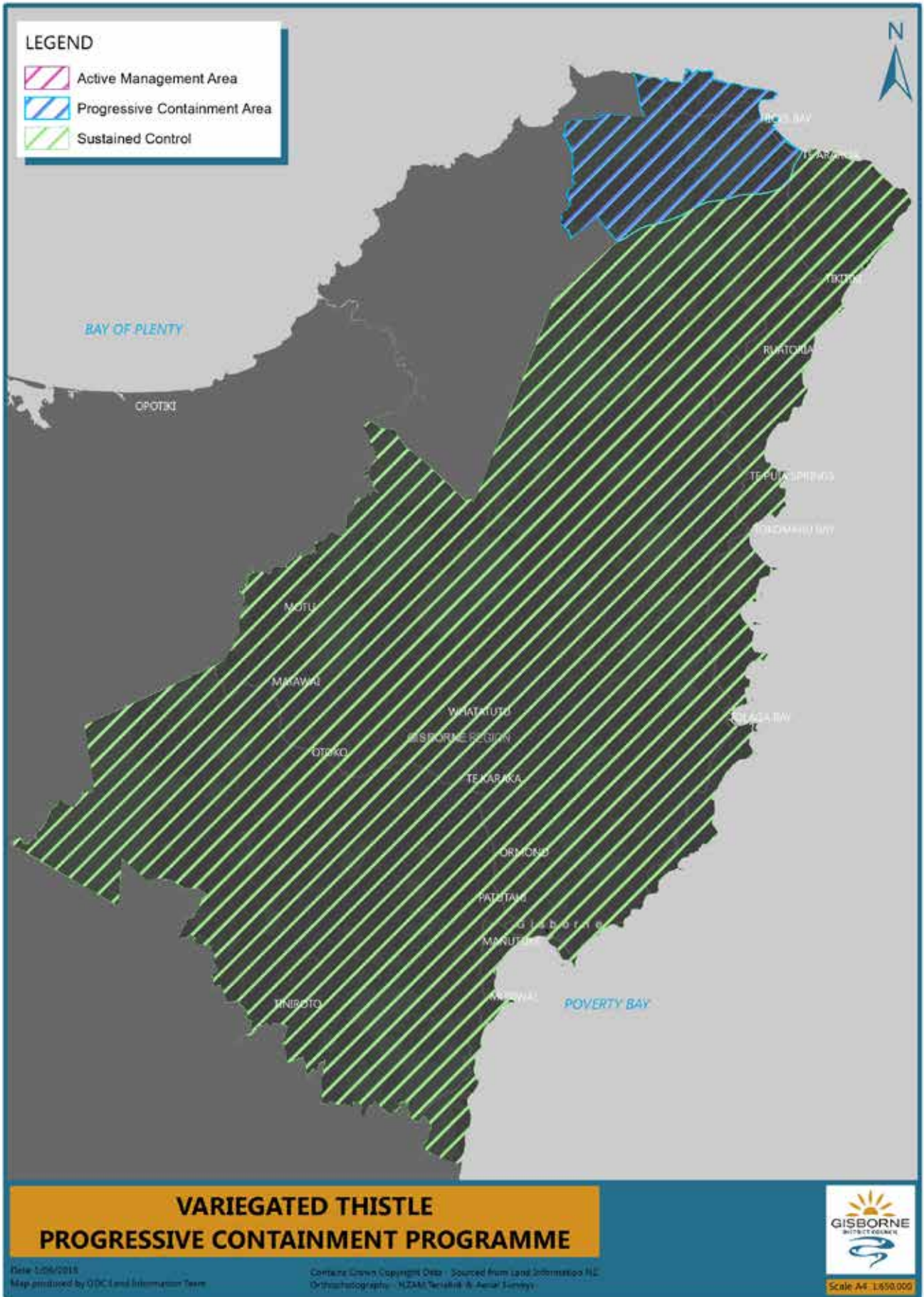
**STAR THISTLE
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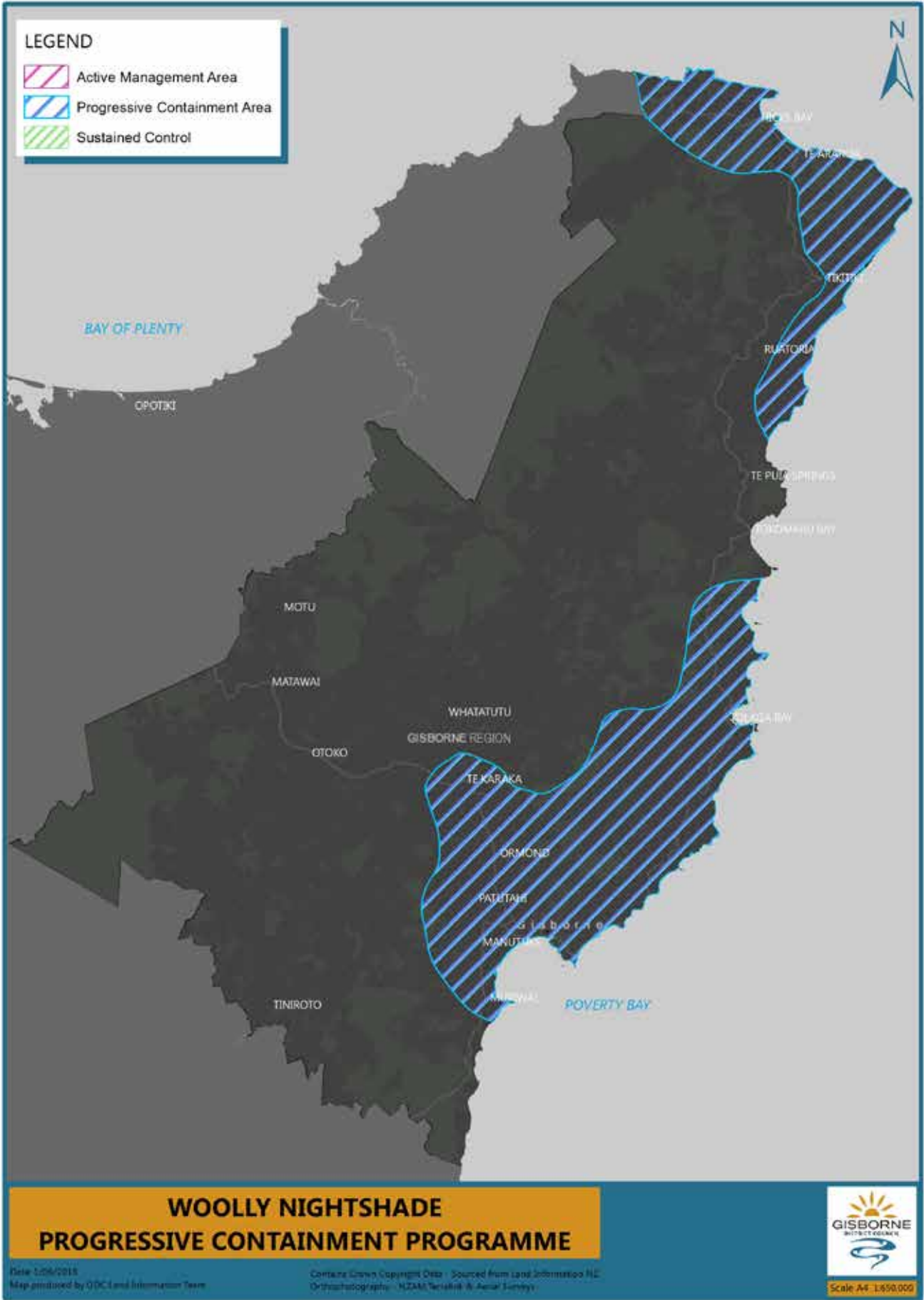


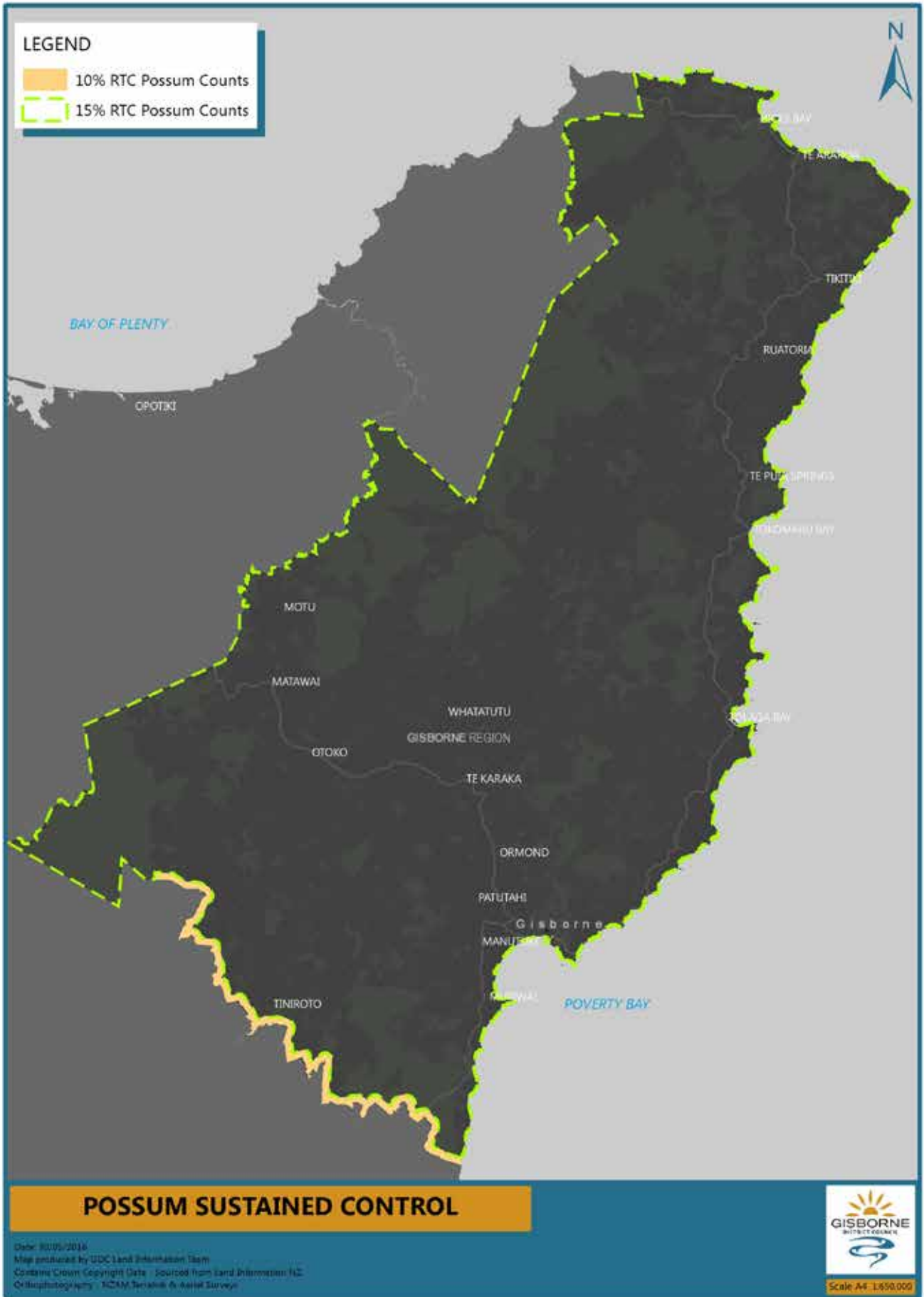
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Map produced by GDC Land Information Team

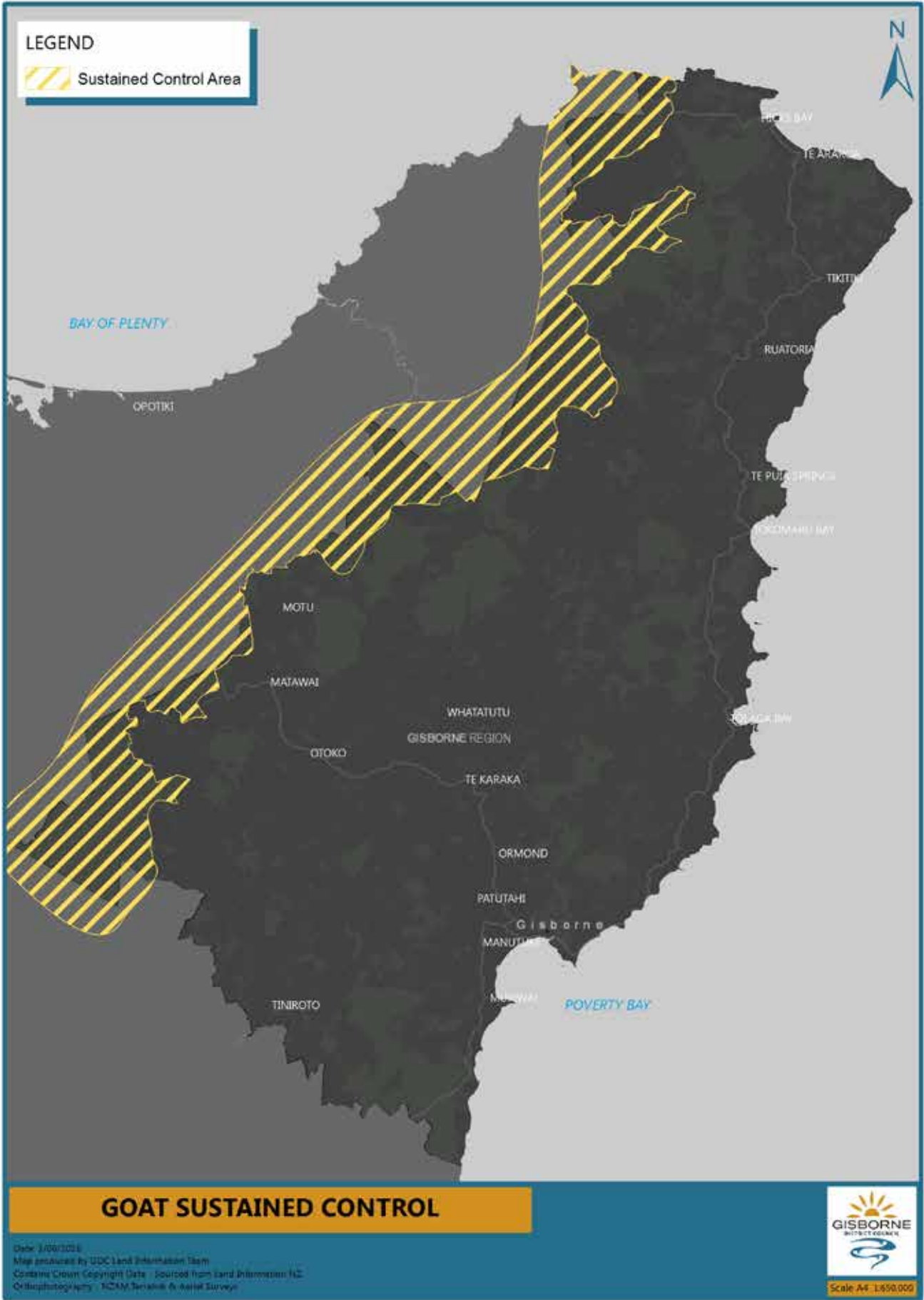
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Orthophotography - NZAM, Terralink & Aerial Surveys

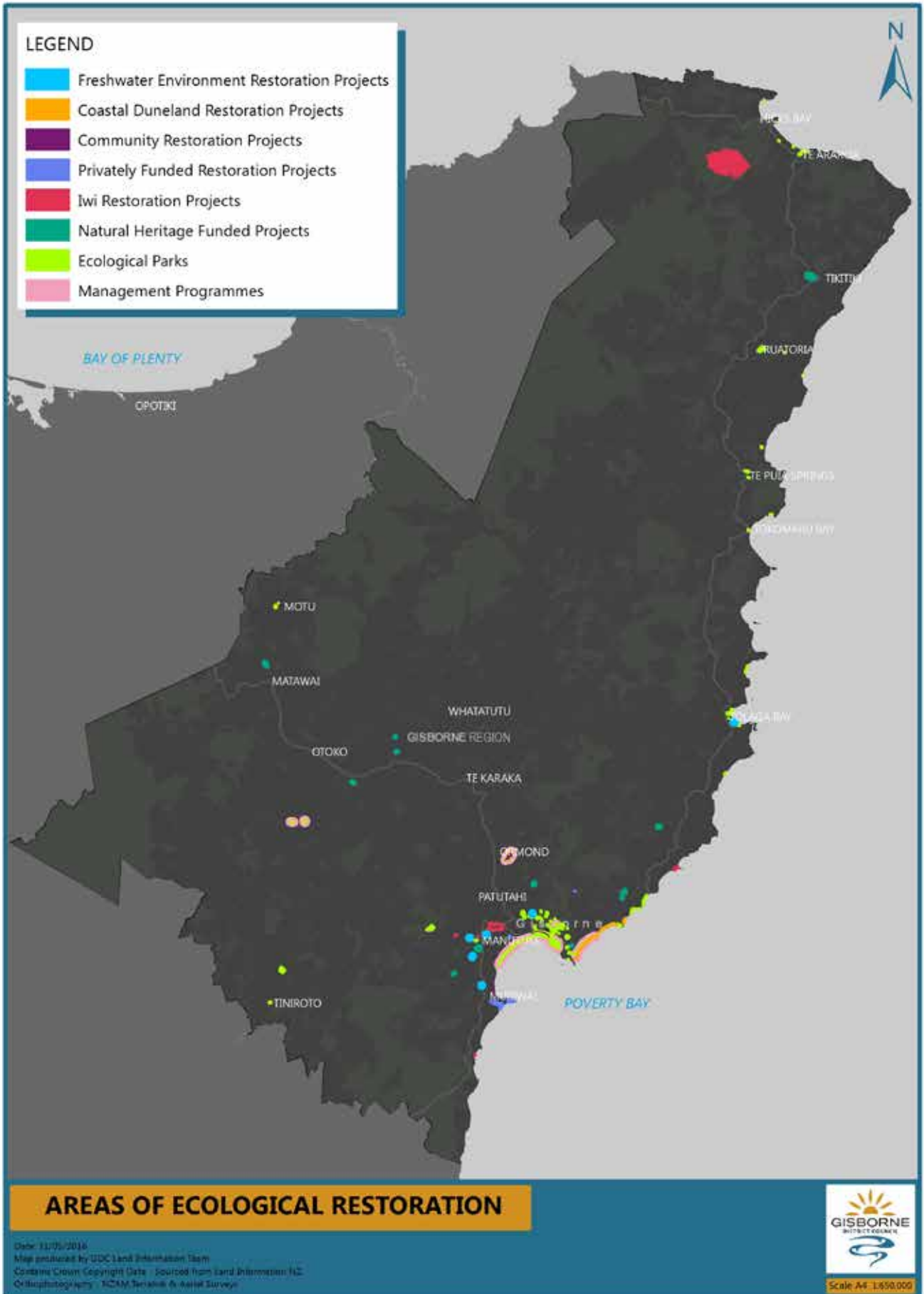
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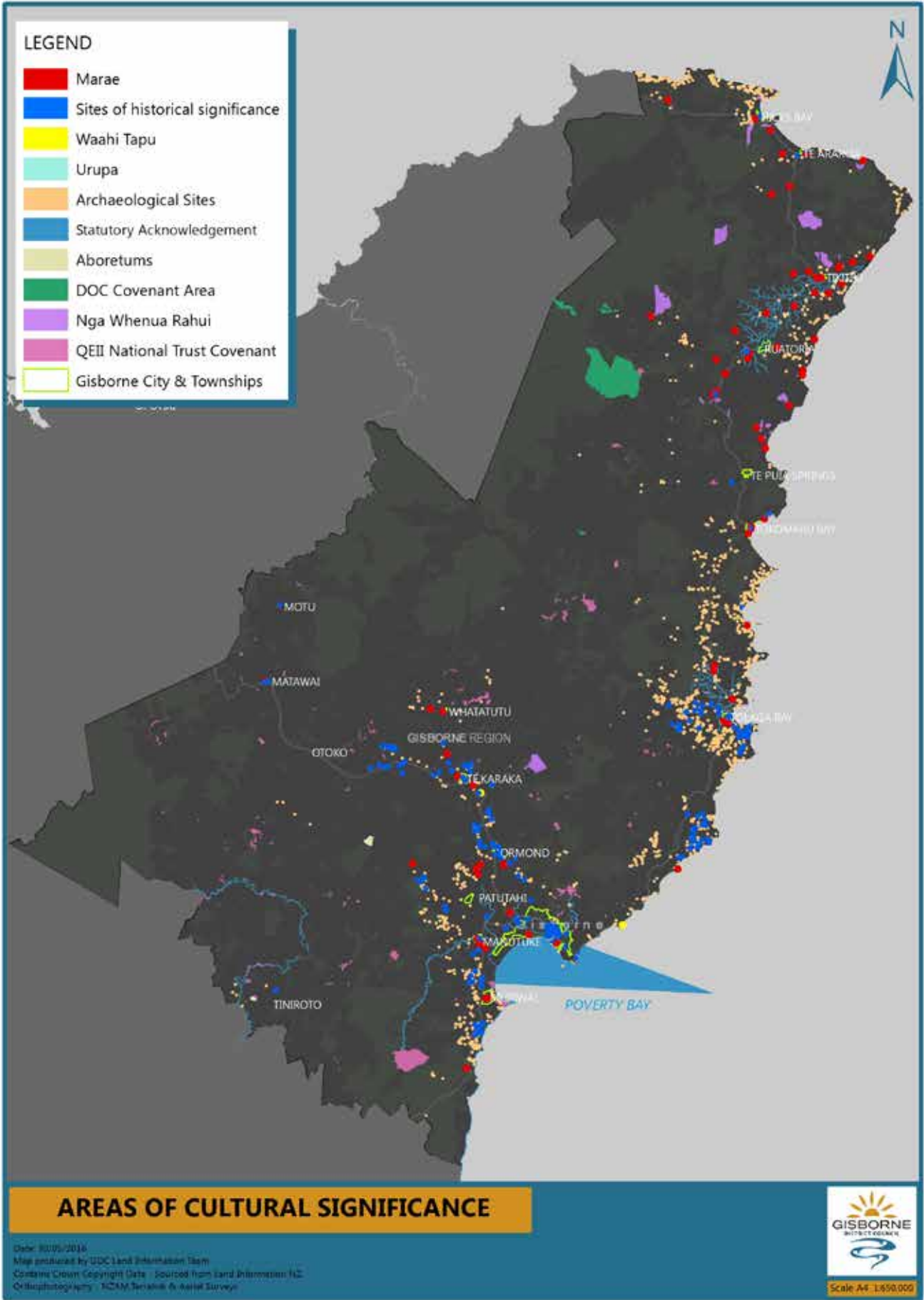














NASELLA TUSSOCK