



# Northland Regional Pest and Marine Pathway Management Plan 2017-2027

## **Operational Plan 2020-2021**

20 August 2020

*Cover photo: A Northern Brown Kiwi chick nestles under its father in their burrow near Ruatangata.  
(Pete Graham)*

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# 1. INTRODUCTION

*Tē tōia, tē haumatia*

*Nothing can be achieved without a plan, workforce and way of doing things.*

## Background

The Northland Regional Council (council) is the management agency responsible for developing and implementing the Northland Regional Pest and Marine Pathway Management Plan 2017-2027 (the *Pest Plan*) in accordance with the Biosecurity Act 1993.

The Pest plan is a combination of the eradication or effective management of specified pests or groups of pests, and a marine pathway plan which is designed to prevent and manage the spread of harmful marine organisms via boat hull fouling within Northland coastal waters.

The Pest plan describes the biosecurity activities that will be undertaken throughout Northland and outlines the management or eradication of specific organisms and/or marine pest pathways. Doing so will:

- minimise the actual or potential adverse or unintended effects associated with these organisms and/or pathways, and,
- maximise the effectiveness of individual actions in managing pests or pathways through a regionally coordinated approach

## Linkage to the Regional Pest and Marine Pathway Management Plan

**2017-2027** (*hereafter referred to as the “Pest Plan”*)

This operational plan has been prepared as a requirement of the Biosecurity Act 1993 section 100B and should be read in conjunction with the Pest Plan. It includes all species listed in the Pest Plan.

## Linkage to Long Term Plan 2018-2028

This operational plan is integrated with council’s Annual and Long Term plans which prescribes the funding and resources allocated to the programmes within this operational plan.

Council's Long Term Plan (2018-2028) maintains a focus on pest management activities in Northland. The plan states that the council will provide the services of:

- Reducing the impact of introduced pests on the environment, economic and social values;
- Protecting the health of forests and lakes through effective regional pest control; and
- Promoting community involvement in pest management, including tangata whenua, communities, district councils and other stakeholders.

## Purpose of the Operational Plan

This operational plan describes the nature and scope of activities the Council intends to undertake in the implementation of the Pest Plan for the period 1 July 2020 – 30 June 2021. For full details of pest management objectives, aims, principle measures to manage pests, and pest management rules, please refer to the Pest Plan.

## 2. IMPLEMENTATION PROGRAMMES

### Exclusion Pests

Section 100V of the Act may be used to investigate emergency control of new incursions of pests that are not otherwise listed in the Pest plan.

Eradication of infestations of the exclusion plants will be attempted by the council in conjunction with other agencies such as MPI and DOC and Auckland council.

### Eradication Pests

The intermediate outcome is to eradicate the pest in an area. In the short to medium term, infestation levels will be reduced to the point where it becomes difficult to detect the pest.

### Progressive Containment Pests

The intermediate outcome is to contain and reduce the geographic distribution of the pest to an area over time. Progressive containment pests are those where a pest is at high densities in parts of Northland, but of low extent or limited range. Eradication is not feasible, but it is feasible to prevent the pest from spreading to other parts of Northland or to eradicate the pest from other parts of Northland.

- Existing populations will be monitored and, where appropriate, systems set in place to prevent further spread.
- New technologies and methods will be investigated and introduced where possible.

### Sustained Control Pests

*Note: Excludes marine sustained control pests - these are described under a separate section.*

The intermediate outcome is to provide for the sustained control of the pest to a level where external impacts are manageable. The focus is on ensuring densities do not reach a level where they are causing significant impacts.

Biodiversity restoration projects controlling sustained control pests are generally managed outside the plan through Biosecurity Partnership Programmes.

### Marine Pathway Management Plan

In 2012 an amendment to the Biosecurity Act 1993 added Pathway Management Plans as a legislative option to control the spread of pests in New Zealand. This operational plan includes both the Marine Pathway Management Plan AND the Marine Sustained Control species listed in the Regional Pest and Marine Pathway Management Plan 2017-2017. Both these programmes of work make up the Marine Biosecurity Programme for Northland undertaken by the Northland Regional Council. This plan has been prepared as a requirement of the Biosecurity Act 1993 section 100B.

### 3. PESTS IN THE PLAN

#### Number of Pest Species in the Plan

Type of Pest	Number of Species (or groups of species) in the Pest Plan				
	Exclusion	Eradication	Progressive Control	Sustained Control	Banned from sale or distribution
Plants	13	21	5	15	37
Animals	8	3		9	
Diseases				1	
Fresh water	3	8	3	2	
Marine				7	

#### Pest Species in the Plan

A breakdown of the pests included in the Pest Plan is detailed overleaf.

## Species included in the Pest Plan

Pest Type	Exclusion Species	Eradication Species	Progressive Containment
<b>Plants</b>	Asiatic knotweed Chinese knotweed Climbing spindle berry Giant hogweed Giant knotweed Holly-leaved senecio Houttuynia Noogoora bur Old man's beard Phragmites Purple loosestrife Sea Spurge Velvet leaf	Akebia Balloon vine Bat-wing passionflower Cape tulip Cathedral bells Chilean rhubarb Evergreen buckthorn Field horsetail Firethorn Gypsywort Lesser knotweed Mexican feather grass Mickey mouse plant Monkey musk Nassella tussock Nutgrass Royal fern <i>Spartina alterniflora</i> <i>Spartina anglica</i> <i>Spartina townsendii</i> Wilding kiwifruit Yellow flag iris	African feather Grass Lantana Manchurian wild rice Mile a minute Pultenaea
<b>Animals</b>	Bearded dragon Big headed ant Blue tongued skink Indian ring-necked parakeet Rainbow lorikeet Rook Sulphur crested cockatoo Wallaby	Feral deer including all species <i>and hybrids of:</i> <i>Cervus</i> <i>Dama</i> <i>Odocoileus</i>	
<b>Disease</b>			
<b>Fresh water</b>	Entire marshwort Orfe Water poppy	Eastern water dragon Eel grass Nardoo Red-eared slider turtle Salvinia Senegal Tea Snake-necked turtle Water hyacinth	Koi carp Perch Tench
<b>Marine</b>			

Pest Type	Sustained Control	Banned from Sale and Distribution (in addition to species listed in the NPPA)	
<b>Plants</b>	Bathurst bur Queen of the night Brazillian Pepper tree Rhus tree Gorse Gravel Groundsel Phoenix palm Privet Wild ginger including: Yellow ginger Kahili ginger Wilding conifers incl: <i>Pinus contorta</i> Douglas fir Maritime pine Radiata pine Woolly nightshade	Agapanthus Black-eyed Susan Broom Brush wattle Buddleia Camphor laurel Cape honey flower Cape ivy Century plant Coastal banksia Cotoneaster including: <i>C. glaucophyllus</i> <i>C. franchetii</i> Eleagnus Elephant's ear English ivy Furcraea German ivy Greater bindweed	Hakea Himalayan fairy grass Himalayan honeysuckle Jasmine Kangaroo acacia Lily of the valley vine Oxylobium Paperbark poplar Periwinkle Prickly moses including: <i>Acacia verticillata subsp. cephalantha</i> <i>A. v. subsp. ruscifolia</i> Sharp rush Sexton's bride Sycamore Sydney golden wattle Taiwan cherry Velvet groundsel
<b>Animals</b>	Argentine ant Darwin's ant Feral and stray cats Feral goat Feral pig Mustelids including: Ferret Stoat Weasel Possum Rabbit Rodents incl: Norway rat Ship rat		
<b>Disease</b>	Kauri dieback		
<b>Fresh water</b>	Brown bullhead catfish Rudd		
<b>Marine</b>	Asian paddle crab Australian droplet tunicate Japanese Mantis Shrimp Mediterranean fan worm Pyura sea squirt Styela sea squirt Undaria seaweed		

## 4. FINANCIAL SUMMARY

Council's Long Term Plan 2018 - 2025 provides the necessary funding, via rates and user charges, for the operational and planning activities associated with pest management.

The 2020-2021 Long Term Plan and Revised expenditure budgets are summarised in the table below:

Biosecurity 2020-2021 Annual Budget Expenditure	LTP	Revised
Biosecurity Overheads *	\$2,413,194	\$2,616,830
Partnerships	\$2,967,757	\$4,020,352
Pest Plants and Freshwater	\$670,023	\$1,020,782
Diseases and Incursions	0	\$511,566
Marine	\$523,432	\$543,495
<b>Total expenditure</b>	<b>6,574,407</b>	<b>8,713,026</b>

\* Includes staff training, vehicle running costs, regional and national working groups, administration staff, and council support services.

NOTE: The budget will change significantly if new funding for wilding pine control and Predator Free 2050 becomes available during the year as is currently predicted.

## 5. TEAM KEY PERFORMANCE MEASURES

Biosecurity has several key performance measures applicable over all or some of the department as detailed in the table below.

Additional focussed key performance measures applicable within specific areas of the Biosecurity are detailed as required in *Sections 6 – 10* of this operational plan.

	Key Performance Measures	How Will This Be Measured?
Whole department	Total number of engagement events and other social media interactions is maintained or is greater than the previous year  Number of relationships and collaborative projects that are underway with hapū / whanau / iwi increases by a minimum of 5% annually.	Events attended and social media interactions recorded and reported annually  Recorded via council databases
Pest Plants Pest Animals Freshwater Pests	Identify new sites of exclusion, eradication and progressive containment pest through passive and active surveillance by council staff, the public, or through regional surveillance.	Evidence of the records of new sites reported and recorded.
Pest Plants Pest Animals Freshwater Pests	Initial investigations for all reported sightings and/or discoveries of exclusion species undertaken within 5 working days.	Reported via council database.
Pest Plants Pest Animals Freshwater Pests	A response plan developed and implemented for any new incursion of an exclusion species within 20 working days of confirmation of species.	Evidence of plans developed.
Pest Plants Pest Animals Freshwater Pests	Initial investigations for all reported sightings and/or discoveries of eradication species undertaken within 5 working days and control actions completed within 20 days.	Reported via council database.

	Key Performance Measures	How Will This Be Measured?
Pest Plants Freshwater Pests	Initial investigations for all reported sightings and/or discoveries of Progressive Containment species undertaken within 5 working days and decisions documented within 20 working days	Council database.
Pest Plants Pest Animals Freshwater Pests	Response to requests from the public on sustained controlled pests will be responded to within 20 working days.	Reported via council database.
Pest Plants	All known plant outlets in Northland are inspected annually for exclusion, eradication, progressive containment and sustained control species, and species banned under the National Pest Plant Accord.	Record of plant outlets visited by staff and any non-compliances found.

## 6. PEST PLANTS

### 6.1 Exclusion Plants

Eradication of infestations of exclusion plants will be attempted by the council in conjunction with relevant Crown agencies and stakeholders where practicable.

Council will provide training to relevant council staff and stakeholders about the identification of the exclusion pests to assist in early detection. Council will provide advice, attend events and undertake publicity campaigns to increase public awareness of exclusion pests.

#### **Regulatory Programmes Include:**

- Enforcement of rules relating to exclusion plants.
- Eradication of exclusion plants found in Northland.
- Inspection / enforcement of rules relating to Plant nurseries and retail outlets (National pest plant accord).

#### **Non-Regulatory Services Include (Not Limited To):**

- Supporting eradications undertaken by other Crown agencies and stakeholders.
- Provide advice about how to manage exclusion plants.
- Support, attend and provide public weed control workshops to raise awareness and provide training to relevant stakeholders.
- Manage contractors relating to control of exclusion plants.

### 6.2 Eradication Plants

Control work will be undertaken annually by council staff / contractors / partners and/or stakeholders and detailed work plans will be developed for specific pests.

#### **Regulatory Programmes Include:**

- Enforcement of rules relating to eradication plants.
- Eradication of species listed within the eradication programme.
- Inspection / enforcement of rules relating to Plant nurseries and retail outlets (National pest plant accord).

#### **Non-Regulatory Services Include (not limited to):**

- Support eradications undertaken by other Crown agencies and stakeholders.
- Provide advice about how to manage eradication plants.
- Support, attend and provide public pest control workshops to raise awareness.
- Manage contractors relating to control of eradication plants.

## Key Performance Measures

Key Performance Measures	How Will This Be Measured?
All management sites visited on scheduled best practice rotation.	Reported from council database.
Annual decrease in number of adult plants observed and /or the infestation rate at existing management sites	Reported from council database.

### 6.3 Progressive Containment Plants

Council staff will aim to eradicate populations outside the containment zone and also reduce the size of the containment zone through a variety of control methods, including but not limited to spraying.

Council staff will also support communities to reduce the impact of progressive containment pests through several regulatory and non-regulatory biosecurity programmes.

#### Regulatory Programmes Include:

- Enforcement of rules relating to progressive containment plant species.
- Eradication and reduction of infestations of progressive containment plants will/may be attempted by the council in conjunction with relevant Crown agencies and stakeholders.

#### Non-Regulatory Services Include (not limited to):

- Develop and support community pest control programmes.
- Develop and support biosecurity environment fund projects.
- Support community and land care groups.
- Provide advice about how to manage progressive containment species.
- Support, attend and provide public weed control workshops.
- Provide public weed workshops.
- Support biocontrol for progressive containment species.

## Key Performance Measures

Key Performance Measures	How Will This Be Measured?
Annual reporting on the status of all progressive containment pests.	Included in the annual Biosecurity Operations Plan report.
100% of NRC managed sites visited on scheduled best practice rotation.	Evidence of schedule and visits made reported back.
Annual decrease in number of adult plants and or the infestation rate at existing NRC managed sites	Reported from council database.

## 6.4 Sustained Control Plants

Council will provide advice to relevant road and rail authority staff regarding development and implementation of management plans for sustained control plants.

Sustained control plants are managed through both regulatory and non-regulatory biosecurity programmes.

### Regulatory Programmes Include:

- Enforcement of rules relating to sustained control plant species.
- Enforcement of Good neighbour rules.
- Inspection / enforcement of rules relating to Plant nurseries and retail outlets (National pest plant accord).
- Inspection / enforcement of rules relating to Quarries.
- Enforcement of rules relating to Road and rail, and development and implementation of management plans).

### Non-Regulatory Services Include (Not Limited To):

- Develop and support community pest control programmes and high value areas.
- Develop and support biosecurity environment fund projects.
- Support community and land care groups.
- Provide advice about how to manage sustained control species.
- Support, attend and provide public weed control workshops.
- Provide public weed workshops.
- Support biocontrol for sustained control plants.

### Key Performance Measure

Key Performance Measures	How Will This Be Measured?
All road and rail authorities have five year weed management plans or prioritised annual plans approved and implemented.	Evidence of management plans in place.

# 7. PEST ANIMALS

## 7.1 Exclusion Animals

Eradication of infestations of exclusion animals will be attempted by the council in conjunction with relevant Crown agencies and stakeholders where practicable.

Council will provide training to relevant council staff and stakeholders about the identification of the exclusion pests to assist in early detection. Council will provide advice, attend events and undertake publicity campaigns to increase public awareness of exclusion pests.

### Regulatory Programmes Include:

- Enforcement of rules relating to exclusion animals.
- Eradication of exclusion animals found in Northland.

### Non-Regulatory Services Include (Not Limited To):

- Support eradications undertaken by other Crown agencies and stakeholders.
- Provide advice about how to manage exclusion animals.
- Support, attend and provide public pest control workshops to provide training and raise awareness to assist in early detection.
- Manage contractors relating to control of exclusion animals.
- Council will provide advice, attend events and undertake publicity campaigns to increase public awareness of exclusion animals.

## 7.2 Eradication Animals

These pests all have the potential to establish widely in the region and are capable of causing adverse effects to the environmental, economic, social or cultural values of the region. Council is either the lead agency or a partner for eradicating these pests from the region.

Eradication of the eradication pests will be undertaken by the council in conjunction with relevant Crown agencies and stakeholders where practicable.

### Regulatory Programmes Include:

- Enforcement of rules relating to eradication animals.
- Eradication of species listed within the eradication programme.

### Non-Regulatory Services Include (not limited to):

- Support eradications undertaken by other Crown agencies and stakeholders.
- Provide advice about how to manage eradication animals.
- Support, attend and provide public pest control workshops to raise awareness.
- Manage contractors relating to control of eradication animals.

## Key Performance Measure

Key Performance Measures	How Will This Be Measured?
All deer farm fences are inspected bi-annually in partnership with the Department of Conservation.	Council database.
100% of NRC deer management sites are visited on scheduled best practice rotation	Evidence of visits recorded on council databases and software mapping
100% of deer incidents are responded to within 48 hours	Incidents and time to respond are recorded in council databases
The location of 100% of deer records are mapped across Northland.	Data recorded on council mapping software

## 7.3 Sustained Control Animals

Sustained control animals are generally managed through non-regulatory biosecurity partnerships, regulatory measures are used when required.

### Regulatory Programmes Include:

- Enforcement of rules relating to sustained control animal species.

### Non-Regulatory Services Include (Not Limited To):

- Develop and support community pest control programmes and high value areas.
- Develop and support biosecurity environment fund projects.
- Develop and support significant biosecurity partnerships (eg. NRC-Kiwi Coast Partnership).
- Support community and land care groups.
- Provide advice about how to manage sustained control animals.
- Support, attend and provide public pest control workshops.
- Provide selected pest control materials.
- Manage contractors relating to sustained control animal control.
- Staff will assist landowners and agencies to develop management plans to manage sustained control animals in Northland.

## Key Performance Measures

Key Performance Measures	How Will This Be Measured?
Increase in hectares of land under CPCA's per annum (increase by 5000 ha).	Evidence of management plans which show hectares of CPCA's.

Increase in kiwi populations within NRC supported programmes – increase by 2% per annum.	Records from kiwi listening databases.
<p>Measure annual outputs of council supported programmes – may include:</p> <ul style="list-style-type: none"> <li>• Number of traps issued</li> <li>• Number of kills recorded</li> <li>• Number of Biofunds approved.</li> </ul>	Council database records.

## 8. DISEASES AND PATHOGENS

The kauri dieback programme is a multi-agency programme involving the Ministry for Primary Industries, Department of Conservation, Northland Regional Council, Auckland Council, Waikato Regional Council, Bay of Plenty Regional Council, and tangata whenua.

The programme will utilise scientific and technological advancements to help reduce the spread of kauri dieback including Matauranga Māori.

### 8.1 Implementation

#### Regulatory Programmes Include:

- Enforcement of rules relating to sustained control disease.
- Development of high-risk kauri dieback management plans.
- Council staff and/or their contractors will visit all places on private land suspected of containing kauri dieback to undertake further assessment or testing.

#### Non-Regulatory Services Include (Not Limited To):

- Develop and support community pest control programmes (CPCA).
- Develop and support biosecurity environment fund projects.
- Develop and support significant biosecurity partnerships (NRC-Kiwi Coast Partnership and Māori).
- Support community and land care groups.
- Provide advice about how to manage sustained control disease.
- Support, attend and provide public kauri dieback workshops.
- Provide selected pest control materials.
- Manage contractors relating to sustained control species.

#### Key Performance Measures

Key Performance Measures	How Will This Be Measured?
<i>100% of remaining aerial survey sites on private land will be sampled and a minimum of 50% will have management plans</i>	Evidence of the number of sites sampled and KDB management plans completed will be recorded on council databases.
A minimum of 5 hygiene stations installed at priority sites.	Evidence of stations recorded on council database

Key Performance Measures	How Will This Be Measured?
Maintain a record of distribution of kauri dieback disease across Northland.	Recorded on national and council data systems.
All incidents are recorded, and a response plan is developed and implemented within 20 working days.	Evidence held on council database.
Deliver a minimum of ten public engagement events annually	Evidence held on council database

# 9. FRESHWATER PESTS

## 9.1 Exclusion Freshwater Pests

### Regulatory Programmes Include:

- Enforcement of rules relating to exclusion freshwater pests.
- Eradication of exclusion freshwater pests found in Northland.
- Inspection / enforcement of rules relating to Plant nurseries and retail outlets (National pest plant accord).

### Non-Regulatory Services Include (Not Limited To):

- Support eradications undertaken by other Crown agencies and stakeholders.
- Provide advice about how to manage exclusion freshwater species.
- Support, attend and provide public pest control workshops to raise awareness.
- Manage contractors relating to control of exclusion species.
- Provide training to relevant council staff and stakeholders about the identification of the exclusion pests to assist in early detection.
- Provide advice, attend events and undertake publicity campaigns to increase public awareness of exclusion pests.

## 9.2 Eradication Freshwater Pests

### Regulatory Programmes Include:

- Enforcement of rules relating to eradication freshwater species.
- Eradication of species listed within the eradication programme.
- Inspection / enforcement of rules relating to Plant nurseries and retail outlets (National pest plant accord).

### Non-Regulatory Services Include (not limited to):

- Support eradications undertaken by other Crown agencies and stakeholders.
- Provide advice about how to manage eradication freshwater species.
- Support, attend and provide public pest control workshops to raise awareness.
- Manage contractors relating to control of eradication freshwater species.

### Key Performance Measure

Key Performance Measures	How Will This Be Measured?
100% of NRC management sites visited on scheduled best practice rotation.	Evidence of schedule and visits made reported back.

## 9.3 Progressive Containment Freshwater Pests

### Regulatory Programmes Include:

- Enforcement of rules relating to sustained control freshwater species.
- Eradication and/or reduction of infestations of the progressive containment freshwater pests may be attempted by the council in conjunction with relevant Crown agencies and stakeholders where practicable.

### Non-Regulatory Services Include (not limited to):

- Council staff will assist land owners to develop management plans.
- Council will provide training to relevant council staff and stakeholders in the identification of pests to assist in early detection.
- Council staff will provide advice, attend events and undertake publicity campaigns to increase public awareness of pests.
- New technologies and methods will be investigated and introduced where possible.

### Key Performance Measures

Key Performance Measures	How Will This Be Measured?
The status of all progressive containment pests and management actions undertaken will be reported annually	Evidence of the status will be included in the annual Biosecurity Operations Plan report.
100% of management sites are visited on scheduled best practice rotation.	Evidence of schedule and visits made reported back.
Maintain an updated distribution record of progressive containment freshwater species.	Reported from council database.

## 9.4 Sustained Control Freshwater Pests

### Regulatory Programmes Include:

- Enforcement of rules relating to sustained control freshwater species

### Non-Regulatory Services Include (not limited to):

- Develop and support community pest control programmes and high value areas.
- Develop and support biosecurity environment fund projects.
- Support community and land care groups.
- Provide advice about how to manage sustained control species.
- Support, attend and provide public pest control workshops.
- Provide selected pest control materials.
- Manage contractors relating to sustained control species.

# 10. MARINE PATHWAYS MANAGEMENT PLAN (MPMP)

## 10.1 Background of the Marine Pathway Plan

Over the life of the RPMP (including MPMP), council has the following aims:

- To increase the number of vessel owners and/or persons in charge of vessels complying with the pathways plan rules.
- To see a reduction in new marine pest introductions to Northland.
- To see a reduction in the rate of spread of established marine pests within Northland.
- To help marine stakeholders, coastal marine area occupiers, vessel owners and the public to gain knowledge and skills to help reduce the impacts and spread of sustained control pests and to understand the risk hull biofouling poses to marine pest spread.

Since 2010 council has had a species-led approach to managing marine pests. However, identifying marine pests and potential risk organisms for Northland is difficult so rather than relying solely on the species-led approach, NRC is addressing a universal vector of spread. Mediterranean fanworm is just one of many species that has entered the region via hull biofouling, with over 100 vessels carrying fanworm found in Northland since 2012. Taking a proactive approach and encouraging cleaner hulls through a MPMP will result in fewer vessels carrying marine pests and other biofouling to the region and reduce the risk of new marine pest incursions.

The programme includes the following species and pathways:

Marine Pests and Pathway	
Marine Pathway plan	Hull fouling: Level of Fouling 2
Sustained control marine pests	Asian paddle crab Australian droplet tunicate Japanese Mantis Shrimp Mediterranean fan worm Pyura sea squirt Styela sea squirt Undaria seaweed

## 10.2 How Will the Programme Be Implemented?

### Year 3: 2020-2021

- Continue with existing communication and advice programmes to assist vessel owners & stakeholders with ensuring compliance with rules.
- The Hull Surveillance Programme will assess a minimum of 2000 vessels. Any vessel carrying a named marine pest in an area without that pest widely established, will be placed under a Notice of Direction and directed to make a plan to have the vessel cleaned. In addition, owners of vessels that exceed the MPMP fouling threshold will be advised and issued a warning letter encouraging them to have the vessel cleaned and explaining that enforcement action will follow if they fail their next inspection and move between designated places.

- NOD's on vessels found with listed marine pests will be tracked in IRIS (councils online incident logging database).
- Owners of structures that constitute high risk in terms of marine pest spread will also be subject to consideration and assessment for the need of a marine pest management plan in accordance with species rules.

## 10.3 Programme Costs

The 2019-2020 diver hull surveillance contract was tendered out at **\$222,000** for inspection of 2,000 vessels and is currently the largest operational cost. At the time of writing this plan, the tender for the 20/21 hull surveillance contract had not been finalised but similar costs are expected. An increase in compliance and a reliance on proxy measures of clean hulls like the voluntary antifoul declaration, a log book system, visual inspections and evidence of haul outs and antifoul applications could see a decrease in frequency of inspections required.

## 10.4 Performance Targets and Measures

Key Performance Measures	How Will This Be Measured?
<p>Compliance with the marine pest and pathway plan is recorded and trends over the duration of the plan are analysed.</p> <p>The vessel hull surveillance programme will inspect a minimum of 2000 vessel hulls annually.</p>	<p>Compliance with the pathway plan and all incidents will be recorded and reported monthly.</p> <p>Evidence of hulls surveyed recorded on council databases</p>
<p>A minimum of two engagement activities annually are conducted to facilitate an increase in awareness of the risk hull fouling poses to the spread of marine pests.</p>	<p>Engagement events will be recorded on council databases</p>
<p>Introductions of new marine pests to Northland and spread of established pests to new designated areas within Northland are recorded and trends over the duration of the plan are analysed.</p>	<p>Number of incidents and reports of marine pests will be recorded and reported monthly.</p> <p>Surveillance activities will be recorded to contribute to an assessment of surveillance effort over the duration of the plan.</p>
<p>All incidents are recorded, and a response plan is developed and implemented within 5 working days.</p>	<p>Incidents recorded on council databases.</p>

## 11. OPERATIONAL PLAN REPORTING

Council will produce a report on the operational plan and its implementation not later than 5 months after the end of each financial year.

A copy of this report will be provided to council.

## 12. OPERATIONAL PLAN REVIEW

This operational plan will be reviewed periodically as required.

**Northland Regional Council**

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