I hereby give notice that a meeting of the Strategy and Policy Committee will be held on:

Date: **Tuesday, 13 October 2020**
Time: **10.00am**
Venue: **Tararua Room,**
Horizons Regional Council
11-15 Victoria Avenue, Palmerston North

STRATEGY AND POLICY COMMITTEE

AGENDA

MEMBERSHIP

Chair	Cr RJ Keedwell
Deputy Chair	Cr JM Naylor
Councillors	Cr AL Benbow
	Cr EM Clarke
	Cr DB Cotton
	Cr SD Ferguson
	Cr EB Gordon
	Cr FJT Gordon
	Cr WM Kirton
	Cr NJ Patrick
	Cr WK Te Awe Awe
	Cr GJ Turkington

Michael McCartney
Chief Executive

Contact Telephone: 0508 800 800
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Postal Address: Private Bag 11025,
Palmerston North 4442

Full Agendas are available on Horizons Regional Council website
www.horizons.govt.nz

Note: The reports contained within this agenda are for consideration and should not be construed as Council policy unless and until adopted. Items in the agenda may be subject to amendment or withdrawal at the meeting.

for further information regarding this agenda, please contact:
Julie Kennedy, 06 9522 800

CONTACTS	**24 hr Freephone : 0508 800 800**	**help@horizons.govt.nz**		**www.horizons.govt.nz**
SERVICE CENTRES	**Kairanga** Cnr Rongotea & Kairanga-Bunnythorpe Rds, Palmerston North	**Marton** 19-21 Hammond Street	**Taumarunui** 34 Maata Street	**Woodville** Cnr Vogel (SH2) & Tay Sts
REGIONAL HOUSES	**Palmerston North** 11-15 Victoria Avenue	**Whanganui** 181 Guyton Street		
DEPOTS	**Levin** 120-122 Hokio Beach Rd	**Taihape** 243 Wairanu Rd		
POSTAL ADDRESS	Horizons Regional Council, Private Bag 11025, Manawatu Mail Centre, Palmerston North 4442			
FAX	06 9522 929			

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AGENDA

1 Welcome / Karakia

2 Apologies and Leave of Absence

At the close of the Agenda no apologies had been received.

3 **Public Forums:** Are designed to enable members of the public to bring matters, not on that meeting's agenda, to the attention of the local authority.

Deputations: Are designed to enable a person, group or organisation to speak to an item on the agenda of a particular meeting.

Requests for Public Forums / Deputations must be made to the meeting secretary by 12 noon on the working day before the meeting. The person applying for a Public Forum or a Deputation must provide a clear explanation for the request which is subsequently approved by the Chairperson.

Petitions: Can be presented to the local authority or any of its committees, so long as the subject matter falls within the terms of reference of the council or committee meeting being presented to.

Written notice to the Chief Executive is required at least 5 working days before the date of the meeting. Petitions must contain at least 20 signatures and consist of fewer than 150 words (not including signatories).

Further information is available by phoning 0508 800 800.

4 Supplementary Items

To consider, and if thought fit, to pass a resolution to permit the Committee/Council to consider any further items relating to items following below which do not appear on the Order Paper of this meeting and/or the meeting to be held with the public excluded.

Such resolution is required to be made pursuant to Section 46A(7) of the Local Government Official Information and Meetings Act 1987 (as amended), and the Chairperson must advise:

(i) The reason why the item was not on the Order Paper, and

(ii) The reason why the discussion of this item cannot be delayed until a subsequent meeting.

5 Members' Conflict of Interest

Members are reminded of their obligation to declare any conflicts of interest they might have in respect of the items on this Agenda.

Minutes of the sixth meeting of the eleventh triennium of the Strategy and Policy Committee (Live Streamed) held at 10.00am on Tuesday 8 September 2020, in the Tararua Room, Horizons Regional Council, 11-15 Victoria Avenue, Palmerston North.

PRESENT	Crs RJ Keedwell (Chair), AL Benbow, EM Clarke, DB Cotton, SD Ferguson, EB Gordon, FJT Gordon (via audio visual link), WM Kirton, JM Naylor (via audio visual link), NJ Patrick (via audio visual link), WK Te Awe Awe, and GJ Turkington.	
IN ATTENDANCE	Chief Executive	Mr MJ McCartney
	Acting Group Manager Corporate and Governance	Mr D Neal
	Committee Secretary	Mrs KA Tongs
ALSO PRESENT	At various times during the meeting:	
	Dr N Peet (Group Manager Strategy & Regulation), Dr J Roygard (Group Manager Natural Resources & Partnerships), Mr R Strong (Group Manager River Management), Mr G Shirley (Group Manager Regional Services & Information), Mr T Bowen (Principal Advisor), Dr A Matthews (Science & Innovation Manager), Dr A Lennard (Environmental Data Analyst), Mr A Smith (Chief Financial Officer), Mr G Bevin (Regulatory Manager) and Ms C Morrison (Media & Communications Manager).	

The Chair welcomed everyone to the meeting and invited Cr Te Awe Awe to say a Karakia.

APOLOGIES
There were no apologies.

PUBLIC FORUMS / DEPUTATIONS / PETITIONS
Due to being in Covid-19 Alert Level 2, no members of the public were granted public speaking rights. The Chair presented a document to Members which had been received from Mr Charles Rudd. The document addressed Mr Rudd's concerns with regard to the use and meaning of various Maori words in reports prepared by Horizons Regional Council.

SUPPLEMENTARY ITEMS
There were no supplementary items to be considered.

MEMBERS' CONFLICTS OF INTEREST
There were no conflicts of interest declared.

CONFIRMATION OF MINUTES

SP 20-27 ***Moved*** ***Turkington/Ferguson***

That the Committee:

confirms *the minutes of the Strategy and Policy Committee meeting held on 11 August 2020 as a correct record, and notes that the recommendations were adopted by the Council on 25 August 2020.*

CARRIED

IMPLEMENTATION OF GOVERNMENT'S FRESHWATER REFORM PACKAGE

Report No 20-120

The report informed Council of the release of the Government's freshwater reform 'Action for Healthy Waterways' package. Dr Peet (Group Manager Strategy & Regulation), outlined the proposed approach to implementation in the Horizons Region, and Dr Matthews (Science & Innovation Manager) mentioned the preliminary discussions and engagement both with iwi and the community in regard to freshwater and other organisational priorities. The Chair separated out the recommendations. A division was called for recommendation c.

SP 20-28 ***Moved*** ***Patrick/Ferguson***

That the Committee recommends that Council:

a. receives the information contained in Report No. 20-120 and Annex.

b. endorses the proposed approach and implementation programme outlined in this report.

CARRIED

c. approves additional expenditure of up to $200,000 to support the first year of the implementation programme. If approved, this budget will come from general rate reserves, with expenditure to occur over the 2020-21 financial year.

Against: Crs Cotton, B Gordon, Kirton, Turkington

For: Crs Benbow, Clarke, Ferguson, F Gordon, Patrick, Naylor, Te Awe Awe, Keedwell

CARRIED

NATIONAL CLIMATE CHANGE RISK ASSESSMENT

Report No 20-121

Dr Lennard (Environmental Data Analyst) introduced the report which outlined the findings of the Ministry for the Environment's National Climate Change Risk Assessment (NCCRA) and its implications for the Horizons region. Dr Lennard highlighted the ten most significant risks from the NCCRA findings, which were prioritised by the level of urgency and consequence associated with them.

SP 20-29 ***Moved*** ***Clarke/Ferguson***

That the Committee recommends that Council:

a. receives the information contained in Report No. 20-121;

b. notes that the National Climate Change Risk Assessment has been completed; and

c. notes the opportunity to engage with central government through the development of the National Adaptation Plan, to ensure effective recognition of local issues and workability at a local level.

CARRIED

LONG TERM PLAN - PROPOSED VISION AND COMMUNITY OUTCOMES
Report No 20-122

Dr Peet (Group Manager Strategy & Regulation) spoke to the report which identified a proposed vision statement and set of community outcomes as part of progress towards Council's Long-term Plan 2021-2031 (LTP). Following consideration by Members of the proposed wording of the vision statement and set of community outcomes, wording amendments to the vision statement and community outcome 1 were suggested.

SP 20-30 ***Moved*** ***Naylor/F Gordon***

That the Committee recommends that Council:

a. receives the information contained in Report No. 20-122.

bi. approves the proposed vision to be included in the draft Long Term Plan 2021-2031, as amended at the meeting:

- Vision Statement:
  Tō tātou rohe – taiao ora, tangata ora, mauri ora.
  Our place – a healthy environment where people are thriving.

CARRIED

Moved ***F Gordon/Ferguson***

bii. approves the proposed community outcomes to be included in the draft Long Term Plan 2021-2031, as amended to Outcome 1 at the meeting:

- Community Outcome 1.
  Our region's communities are resilient to the impacts of natural hazards and climate change.
  Communities understand natural hazards and our changing climate and are supported to respond and adapt.
- Community Outcome 2.
  Our region's ecosystems are healthy.
  From the mountains to the sea a full range of healthy ecosystems are valued for their intrinsic worth and can provide sustainably for communities.
- Community Outcome 3.
  Our region's transport networks are effective.
  Safe, sustainable public transport and infrastructure planning that connect communities and reduce the region's carbon emissions.

- Community Outcome 4:
  Our region's economy is thriving.
  A sustainable economy that supports communities to thrive socially, culturally and environmentally.
- Community Outcome 5.
  Our region's communities are vibrant and empowered.
  Communities are enabled to participate meaningfully in decision making and take action to benefit our collective wellbeing.

CARRIED

Moved ***Naylor/F Gordon***

c. notes that consultation on the proposed vision and community outcomes will form part of the Long-term Plan process.

CARRIED

REPORT OF THE RESOURCE MANAGEMENT REVIEW PANEL - SUMMARY OF IMPLICATIONS FOR HORIZONS
Report No 20-123

Dr Peet (Group Manager Strategy & Regulation) provided the Council with a summary of the findings of the Resource Management Review Panel, and set out the potential implications for Horizons Regional Council.

SP 20-31 ***Moved*** ***Benbow/Turkington***

That the Committee recommends that Council:

a. receives the information contained in Report No. 20-123 and Annex.

CARRIED

The meeting closed at 11.38am.

Confirmed

CHIEF EXECUTIVE CHAIR

Report No.	20-141
Information Only - No Decision Required	

PRESENTATION: FOXTON FUTURES

1. PRESENTATION

1.1 David Clapperton (Chief Executive, Horowhenua District Council) and Nicki Brady (Deputy Chief Executive) will make a presentation to the Strategy and Policy Committee on Foxton Futures (10.00am).

2. RECOMMENDATION

That the Committee recommends that Council:

a. receives the presentation on Foxton Futures from David Clapperton and Nicki Brady (Horowhenua District Council).

3. SIGNIFICANCE

3.1. This is not a significant decision according to the Council's Policy on Significance and Engagement.

Michael McCartney
CHIEF EXECUTIVE

ANNEXES

There are no attachments for this report.

Report No.	20-142
Decision Required	

PEST PLAN UPDATE

1. PURPOSE

1.1. To update Council on progress against the pest plant species managed within the **Regional Pest Management Plan (2017-37)** (the Plan).

2. EXECUTIVE SUMMARY

2.1. The region's biodiversity and productive capacity is threatened by pest plants. Pest plants transform ecosystems, sometimes irreparably. They can cause the collapse of forest canopies, smother regeneration in natural areas, modify coastal dune systems, invade alpine and tussock land, degrade wetlands, clog waterways and reduce the potential of agricultural land.

2.2. Pest plants also have a social element. Ratepayers identify that pest plants can diminish the natural capital of our region. People may struggle to access areas they want to use for recreation and vistas can change as weeds impact landscapes. Weeds can also impact landowners' activities. In summary, pests invade, impose costs and transform.

2.3. In recognition of its regional leadership role under the **Biosecurity Act 1993** (the Act), Horizons is the management agency for the Plan. A plan is made by Council fixing its seal once it has determined the process described in the Act was satisfactorily completed. This requires a council to propose a plan, complete requirements such as, but not limited to, checking consistency with the **National Policy Direction for Pest Management 2015** (NPD) and ensuring that each subject qualifies as a pest according to rigorous criteria, as well as undertaking consultation with those impacted by the presence of the pest plants.

2.4. This report reviews two years' progress against the objectives of the Plan. The Plan provides management objectives for 55 plant species. The plan also covers the pest animals (wallabies, possums, rabbits and rooks), and progress on these is not reviewed as a part of this report.

2.5. The Plan has a term of 20 years, with a planned review to begin within 10 years of the Plan start date (2017). This review, two years into the Plan, is intended to inform Council ahead of relevant decisions informing the Long-term Plan.

2.6. The 55 pest plant species covered by the Plan are managed differently, depending on their abundance and extent; management is aimed at either eradication from the entire region, or from mapped zones.

2.7. Horizons assumes the management responsibility for 34 species described in the Plan while 8 are the full responsibility of land occupiers and 13 are shared between Horizons and occupiers including the **Department of Conservation** (DOC). For species that appear on non-rateable or Crown land, the goal is to minimise the spread via a good neighbour rule and larger control programmes via Approved Management Plans or Memoranda of Understanding.

2.8. The intent of the Plan is to prevent, eliminate, or reduce the adverse effects of those organisms deemed pests and to maximise the effectiveness of the individual pest management action by way of a regionally coordinated approach.

2.9. The 2017 Plan is a refinement of previous approaches to pest management, including new concepts of Clear Land Rules, Good Neighbour Process Zones, Approved Management Plans, and alignment with the NPDs Good Neighbour Rules.

2.10. The review two years into implementing the plan identifies that identifies that 46 of the 55 (84%) plant species in the Plan are on track to meet the Plan objectives and nine species out of 55 (16%) are not likely to meet the objectives set out in the Plan (Table 1).

Table 1: Potential levels of success for different designations.

	Potential Level of Success			
Designation	High	Likely	Low	Total
Exclusion	11			11
Eradication	9	7	2	18
Progressive Containment - Mapped	8	1	2	11
Progressive Containment - Unmapped	10		5	15
Total	**38**	**8**	**9**	**55**

2.11. The nine species where Plan objectives are not likely to be met are overviewed further in Table 2 and within the report. The report briefly overviews options to address the potential of Plan objectives not being met for these species including completing additional activity on these weeds and reviewing the Plan.

Table 2: Species assessed as having a low potential to meet Plan objectives based on current activity levels.

Designation	**Species with objectives unlikely to be met**	**Notes**
Eradication	Chinese pennisetum	Grass pest in pasture, low numbers so theoretically achievable; total elimination will need more farmer responsibility and staff resource. Land-use change from pasture to retirement is a risk.
	Purple loosestrife	Eradication is theoretically achievable with a low number of new sites and a weed that is easily found. The main issue is safe access to access to sites around Lake Horowhenua and other land holdings in the area, as well as limited herbicide tools for use in wetlands.
Progressive containment-mapped	Evergreen buckthorn	Species is difficult to find as seeds are dispersed by birds and mixed with other vegetation and over a large area. Hot spots are Levin, Waitarere beach and Whanganui rural areas. Surveillance post-RPMP designation has discovered a larger than expected regional population.
	Old man's beard	Suppression more likely as spill-over from Good Neighbour Process Zone (GNPZ), other agency programmes and infected terrain will make eradication very costly.
Progressive containment-unmapped	Eelgrass, egeria, hornwort, lagarosiphon, reed sweetgrass	Eradication of aquatic weeds at sites is difficult to achieve due to late discovery and low probability of success. There are challenges with control operations in freshwater environments including cost and restricted methodologies available for use in aquatic environments.

3. RECOMMENDATION

That the Committee recommends that Council:

a. receives the information contained in Report No. 20-142.

b. considers the results of the review of the Regional Pest Management Plan as a part of the budget process for the Long-term Plan.

4. FINANCIAL IMPACT

4.1. This item does not have a financial impact. Depending on Council's decisions on this paper, there may be a financial impact. Should Council choose to invest more in the programme, or to review and adjust the Plan to account for species where goals are unlikely to be reached, there will likely be a financial impact. The Long-term Plan process provides an opportunity to review investment in Biosecurity Plants activity. At this point there are no plans or resourcing allocated for a plan update process for the Long-term Plan.

5. COMMUNITY ENGAGEMENT

5.1. The Plan went through a range of internal and external steps in its formation, including a submission and consultation process. This is a public item and Council may deem it sufficient in terms of community engagement. The Biosecurity Plants team's work includes a range of community engagement and is reported regularly to Environment Committee.

6. SIGNIFICANT BUSINESS RISK IMPACT

6.1. This paper is not considered to have a significant business risk impact; however, it does provide some risk assessment about the Plan goals and whether they are able to be achieved. It also identifies some targets that are not on track to be achieved and which therefore present a risk to Horizons' reputation.

7. CLIMATE IMPACT STATEMENT

7.1. This decision is likely to have no or minimal increase in greenhouse gas emissions over the current level of emissions generated through the pest plant activities undertaken by staff and contractors.

7.2. Horizons is required to deliver the pest plant activity by the Regional Pest Management Plan 2017-2037, as provided for by the Biosecurity Act 1993.

8. BACKGROUND

8.1. Roles and responsibilities for biosecurity are set out in part 2 of the Biosecurity Act 1993. The Director-General of the **Ministry of Primary Industries** (MPI) provides overall leadership on pest management in New Zealand, including decision-making on new pest incursions and may lead responses where necessary. Regional Councils and Unitary Authorities provide regional leadership on pest management and have key relationships with communities in their respective regions.

8.2. The Biosecurity Act is a significant enactment and is the principal statute for managing pests and other harmful organisms in NZ. It also sets out the processes for providing resources needed to manage or eradicate such organisms.

8.3. The Act overrides any of these laws when a biosecurity emergency or provisional control programme has been declared under Part VII (Emergency Powers) of the Act. These

occasions will be limited because strict criteria govern when a biosecurity emergency or provisional control programme may be declared. These control measures are most likely to be used where the movement of people needs to be restricted or equipment commandeered, to prevent the spread or development of the organism of concern.

8.4. The previous **Regional Pest Plant Management Strategy** (RPPMS) (2007-12) was extended for an interim period of five years due to the timing of concurrent government processes. These included a review of the Biosecurity Act and the formation of the **National Policy Direction** (NPD) and a satisfactory consultation period for the changes proposed to our pest management. An outcome of the Biosecurity Act change was for all strategies to now be called Plans and for these to be nationally consistent in terminology and to account for and be constructed around regional outcomes. The NPD also dictates a finite set of designations for pests, and these are all used in the Plan except for site-led pest programmes.

8.5. The Act requires that Horizons be satisfied the named pests are capable of affecting:

- Economic wellbeing,
- The viability of threatened species of organisms,
- The survival and distribution of indigenous plants or animals,
- The sustainability of natural and developed ecosystems, ecological processes and biological diversity,
- Soil resources,
- Water quality,
- Human health,
- Social and cultural wellbeing,
- The enjoyment of the recreational value of the natural environment,
- The relationship between Māori, their culture and traditions, and their ancestral lands, waters, sites, wāhi tapu, and taonga,
- Animal welfare.

8.6. Horizons reviewed the species nominated by public submission and those previously managed by the RPPMS against these factors.

8.7. The Plan has a term of 20 years with a planned review to begin within 10 years of the Plan start (2017).

8.8. Species are managed in differing ways depending on their abundance and extent, for eradication from the entire region, from mapped zones or unmapped areas, depending on abundance and proximity.

8.9. Horizons assumes the management responsibility for 34 species while 8 are the full responsibility of land occupiers and 13 are shared between Horizons and occupiers including the Department of Conservation. For species that appear on non-rateable or Crown land, the goal is to minimise the spread via a good neighbour rule and larger control programmes via Approved Management Plans or Memoranda of Understanding.

8.10. The intent of the Plan is to prevent, eliminate, or reduce the adverse effects of those organisms deemed pests, and via the Plan to maximise the effectiveness of the individual pest management action by way of a regionally coordinated approach.

8.11. The Act requires the management agency of a pest plan to provide annual Operational Plans and an annual monitoring report. This paper is not the annual monitoring report. The annual monitoring report was provided to the Environment Committee on June 9 2020.

9. DISCUSSION

9.1. The Plan deals with species, and groups these into NPD-mandated designations of exclusion, eradication, progressive containment and sustained control. This discussion provides an explanation of each designation with an assessment of how Horizons and other occupiers and agencies are progressing against each species, some of which are new to regional management and others which have been managed for some time. We have relied on a mix of short-term and long-term infestation data collected by the pest plant team, along with staff experience and industry-based assessment.

9.2. A summary table is included in each designation section which 'scores' the species against the likelihood of the status quo interventions from Horizons and other partners, and including constraints or support contributing to the level of success against RPMP objectives. This level of success 'score' is represented by colours:

- **Green** - high probability;
- **Amber** - potentially likely but with issues such as cost, external influence, plant characteristics and the like;
- **Red** - low probability.

9.3. The scores were calculated using species-specific factors to build a weed risk assessment component, which is combined with current regional objective data collected since 2010. The factors and data used are:

- Number of sites
- Known extent of occurrence; how much land needs to be surveyed thoroughly
- Known area of occupancy; the area of plants requiring control
- Annual cost of control
- Confidence of known distribution
- Programme risk factors; do we have confidence in surveillance tools to find locations and is the spread controlled?
- Plant-specific characteristics such as how resilient to control, how long-lived are seed banks and are the plants able to be controlled prior to repeat seeding or spread events? and
- The current zero-level status of the known infestation; how close are we already?

9.4. This report presents a summary of results for each of the RPMP categories i.e. exclusion, eradication and progressive containment, and then presents a summary section. The final section discusses options to address the species that are low probability of meeting their management objectives.

10. Exclusion pest plants

10.1. A large number of pest plants in New Zealand have the potential to expand their range and become a problem within the Horizons region. The Exclusion section of the Plan identifies some of these. The programme has been developed to assist early detection of new invasive species arriving in the region. The pest plants included in the Exclusion programme are not currently present in the region but are known to be a threat elsewhere and are likely to find a suitable habitat within the region. The programme aims to detect these pests before they become widely established in the region and to facilitate a quick response through appropriate resourcing that will enable the control or management of these species on rateable land. 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.

Summary

10.2. Our assessment, based on available information, is that none of the Exclusion species have been found to date and all eleven Exclusion species are on track (Table 3).

Table 3: Exclusion species summary

Species	Effort required to reach objective	Notes
Californian bulrush	Surveillance of Taumarunui ponds and other potentially infected effluent pond plantings and west coast estuaries	Previously known but eradicated, potential for coastal dispersal, nursery contamination low risk
Chilean needle grass	Surveillance of dryland farms, engagement with stock traders and Hawkes Bay Regional Council	
Heath rush	Surveillance	Only known of in the South Island.
Humped bladderwort	More intense surveillance and engagement with occupiers - known to be spreading south	Eradication once found is difficult so action needed to protect valuable water bodies. Most likely spread intentionally by humans
Manchurian wild rice	Coastal deposition location surveillance	Limited machinery movement and these plants are able to be found by detector dogs.
Noogoora burr	Cropland and pasture surveillance	Limited machinery movement and plants able to be found by detector dogs.
Phragmites australis	Surveillance and engagement with Hawkes Bay Regional Council	
Saffron thistle	Dryland surveillance and engagement with Hawkes Bay Regional Council	
Saggittaria platyphylla	Surveillance of garden and amenity ponds	
Sweet pittosporum	NPPA plant so working with plant nursery trade	Difficult to identify.
Tussock Hawkweed	Very close to region in area visited by potential dispersal pathway from Kuripapongo	One of the many *heiraciums* in New Zealand.

Example

10.3. An example of this type of pest is Chilean needle grass. Mature seeds can penetrate animal hides, causing animal welfare issues as well as preventing shearing or dagging of sheep and downgrading carcasses at processing plants. It is a weed predominantly of dryland pasture with infected habitat in New Zealand matching the station country east of Taihape. It has been known to be present in Waipawa, Hawkes Bay, and the wider Marlborough district though recent discoveries in North Canterbury highlight the need to stay vigilant and engage with the industry pathway of stock, stock feed, gravel and equipment movement.

Image 1: Chilean needle grass, Waipawa. (Hawkes Bay Regional Council).

10.4. The Pest Plant Team uses a register of our exclusion species which details:

- Timeliness of inspections
- Named locations for inspections
- Responsible staff and other organisations required to participate in surveillance.

10.5. We use social media, newspapers, people engagement and direct location searching in our surveillance.

11. Eradication pest plants

11.1. Horizons' eradication programme covers species for which the Council has opted in the Plan to be the lead agency or partner in the eradication of these pests from our region. These pests are present in the Manawatū-Whanganui region 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. The intermediate outcome is to eradicate the pest in an area. In the short term to medium term, eradication involves reducing infestation levels to zero levels. This category includes potentially invasive pests where their rate of increase or geographic extent is not well known, but is assumed to be at low densities or low geographic spread.

11.2. Horizons assumes the management responsibility for all locations on ratepayer land in the region for plants in this designation, except for Chinese pennisetum and woolly nightshade, where occupiers have shared or full responsibility to control. Crown or territorial organisations have their own programmes against five of the 18 species.

Summary

11.3. Our assessment, based on available information, is that 16 of the 18 eradication category species of the RPMP (Table 4) are on track, with nine at a high probability of meeting the RPMP objective, seven that are likely to meet the RPMP objective, and two (Chinese pennisetum and purple loosestrife) that are unlikely to meet the RPMP objective.

Table 4: Eradication species summary.

Species	Effort required to reach objective	Notes	Infestation status	
			Extent of Occurrence (ha)	% of all sites at zero levels
African feather grass	Increased surveillance	New sites within well-searched river reaches. Good control of land-based sites though annual inspection required for some time. Management of upper Whanganui River is noted as an ongoing risk.	405 ha	90%
Alligator weed	Increased surveillance and control resources needed after Mangaone catchment detection, 2020.	Long-term management is required due to root system persistence. Spread risk reduced, abundance reduced and surveillance over long term. Ongoing work with Ruapehu District Council and Palmerston North City Council.	17 ha	50%
Arrowhead	Increased surveillance	Identification and surveillance are issues due to numerous garden ponds that are difficult to find and eliminate.	0.002 ha	100%
Blue passion flower	Increased surveillance	Known sites surveillance is an issue due to urban placement.	0.3 ha	98%
Cathedral bells	Status quo	Long-term site management and rapid growth means plants mature annually.	26.7 ha	76%
Chilean rhubarb	Increased surveillance	Due to number of sites, and especially a few in Whanganui hinterland associated with cliffs and dense bush, make locating all difficult	255 ha	90%
Chinese pennisetum	Ongoing effort from land occupiers and contractors needs to be increased	Grass pest in pasture, low numbers so theoretically achievable although total elimination will need more farmer responsibility and staff resource. Land-use change from pasture to retirement is a risk.	199 ha	45%
Climbing alstromeria	Increased surveillance	Expect this to change as current score is based on new site numbers.	13 ha	25%
Climbing spindleberry	Status quo	Long-term site management and persistence of sites mean eradication is some time away but spread potential is very low.	80 ha	76%
Himalayan balsam	Increased surveillance	Easily killed, depends on good surveillance.	2.3 ha	83%
Knotweed (Asiatic and giant)	Status quo	Good control at state highway, Ruapehu and Rangitikei District Council roadside sites; one new site in Palmerston North during 2020.	2.4 ha	94%
Nassella tussock and Mexican feather grass	Increased surveillance	Limited sites, although undiscovered new sites create risk as there is a large number of low-risk urban sites. Roadside water table sites within Rangitikei District require monitoring.	1 ha	76%
Purple loosestrife	Unlikely to achieve target for eradication due to habitats and restricted access to all invaded locations	Low number of new sites, easily found. Currently there is incomplete control due to restricted access to areas with purple loosestrife around Lake Horowhenua and on other land holdings. Further there are limited herbicide tools for use in wetlands.	92 ha	82%
Queensland poplar	Increased surveillance	Apart from surveillance risk, knowledge of sites is increasing and plant is controllable.	0.04 ha	78%
Rum cherry	Increased surveillance	Few sites at present.	0.001 ha	100%
Senegal tea	Status quo	Easily found, limited distribution. Aquatic environment only issue.	1 ha	75%
Spartina	Status quo	No new areas, good surveillance with dog, collaboratively managed with DOC. Recent efforts have been excellent.	510 ha	100%
Woolly nightshade	Treatment of large, persistent infestations. Requires more staff resourcing to deal with large number of sites around Palmerston North and Whanganui.	Easily found and controlled.	174 ha	85%

Example

11.4. An example of an eradication pest is purple loosestrife. Chosen by pond gardeners for its shock of upright purple flowers, it quickly became evident that the invasive potential observed overseas was happening in New Zealand. Capable of producing many thousands of seeds per plant and forming large rafted, persistent populations, this weed is considered one of New Zealand's worst herbaceous riparian transformers.

11.5. This species is a candidate for achieving the pest plan goal of eradication. The species is considered at a relatively low level of abundance in the region (17 locations, with three sites having active adult plants). Purple loosestrife is an easily discovered plant with control options available for most environments to enable control and seedling reduction over time, making eradication a feasible management objective if access to the sites and resources are sufficient.

Image 2: Purple loosestrife, Lake Horowhenua.

11.6. Most sites identified as having purple loosestrife have been successfully controlled to zero levels within the region as control has been undertaken for a number of years and we have the right tools to enable eradication at sites.

11.7. However, this species is also an example of the challenges of placing a plant in the Eradication designation. To be successful, a programme needs to build up full knowledge of all the locations of these plants, have the tools available to sustain control of plants at zero levels where no seeding and spread takes place, and to have control of sites to the extent that access is available and uncontrolled dispersal via human assistance does not occur. Another factor is the influence of other organisations on the goal, due to shared management. There is a general rule of thumb relating to the last 5% of an infestation costing as much to remove as the first 95%, as individual plants are harder to find and the close-out of management programmes can extend to many years. Programmes may drop off or be minimised through factors such as public perception or funding cuts when the pest species are not visible although unfortunately this is the very time when the effort needs to be continued to achieve eradication. Most of our target species have or could have some

element of external stakeholder interest, with most species being well maintained, and several species have stakeholder relationships flagged as potential risks to success.

11.8. Purple loosestrife is one weed species where DOC is managing an infestation at Papaitonga Scenic Reserve (Lake Waiwiri), which is adjacent to our largest infestation. However, Horizons staff have experienced restricted access to areas around Lake Horowhenua and places downstream, which has prevented management of the largest population of purple loosestrife in the region. As a result, the population has grown to a point where we are unlikely to achieve the Plan objective, and the increasing population around the lake is putting pressure on nearby lakes. Early in 2019 staff received a fresh report of purple loosestrife from a nearby lake owner, along with concerns from DOC about the increasing plant population creating concern for their well-managed infestation at Papaitonga Scenic Reserve.

11.9. Lake Horowhenua and Hokio Beach have almost 15 hectares of solid infestation. Previous control efforts were very successful with control initiated in the late 1990s. This initially required weeks of gun and hose work and tens of thousands of dollar but the required effort was reduced to one week of knapsack control work after several years, costing less than $5,000 per year by 2010 compared with the partial control in 2020-21 estimated to cost $17,000.

11.10. The purple loosestrife example is not the norm and 16 of 18 eradication species are on track to reach the Plan eradication objective. Of the 16, seven are likely to be controlled to our goal level, however are difficult to manage. As was learnt this year, our objectives are constantly at risk from undetected range expansion requiring staff and budget reallocation to respond to occurrences. The Palmerston North alligator weed 'incursion' has almost tripled the alligator weed footprint in the region, from 6 ha to 17 ha, and we now have a river system and flood inundation zone of thousands of hectares to survey. Prioritising this species over others means we have to redirect resources to ensure we are successful.

11.11. The latest data from our site recording system shows 84% of the 1,624 Eradication species sites we manage are at zero levels. Those we have managed for longer than three years are over 84%.

11.12. The two graphs in this section show the increasing percentage of sites meeting the objective of zero levels, and the reducing plant area of occupancy (AOO) of these sites in our region. The large jump in area of AOO from 2017-18 to 2018-19 is due to an adjusted accounting process for the area inundated by purple loosestrife. Overall, the percentage of sites at zero levels has increased from 40% in 2010-11 to 84% in 2019-21, showing solid progress for this measure and the area of the region with eradication plants increased from 4.65 ha in 2017-18 to 19.91 ha in 2018-19, then reduced to 19.27 ha in 2019-20.

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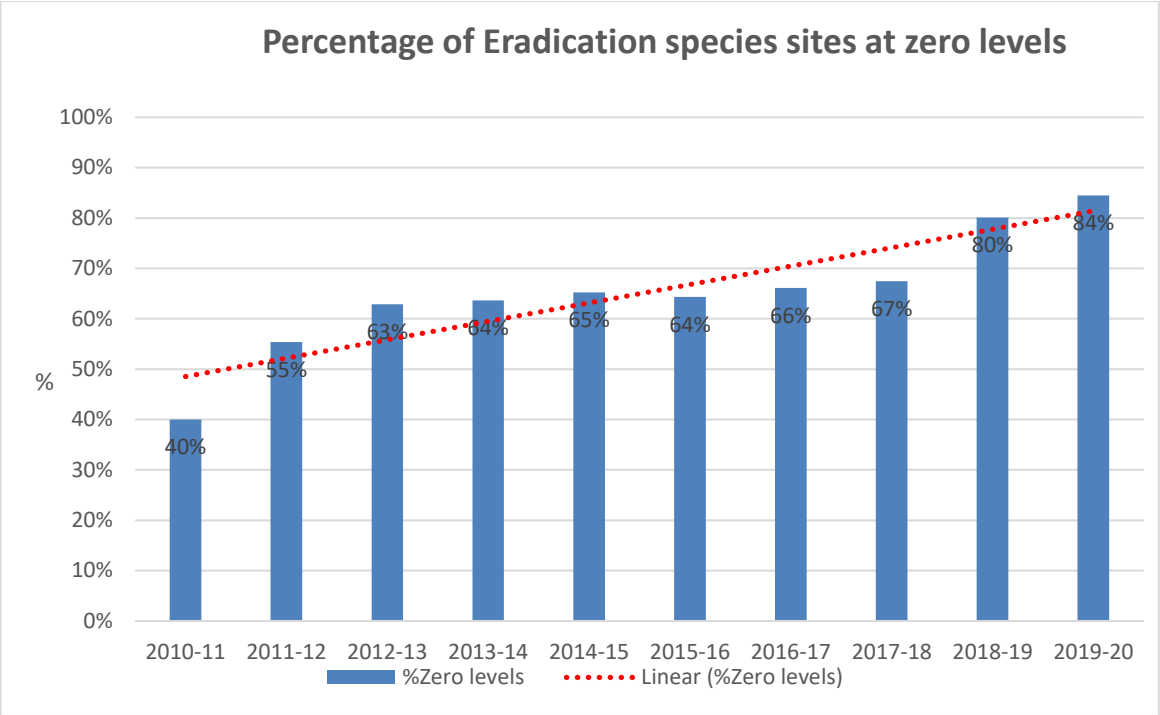
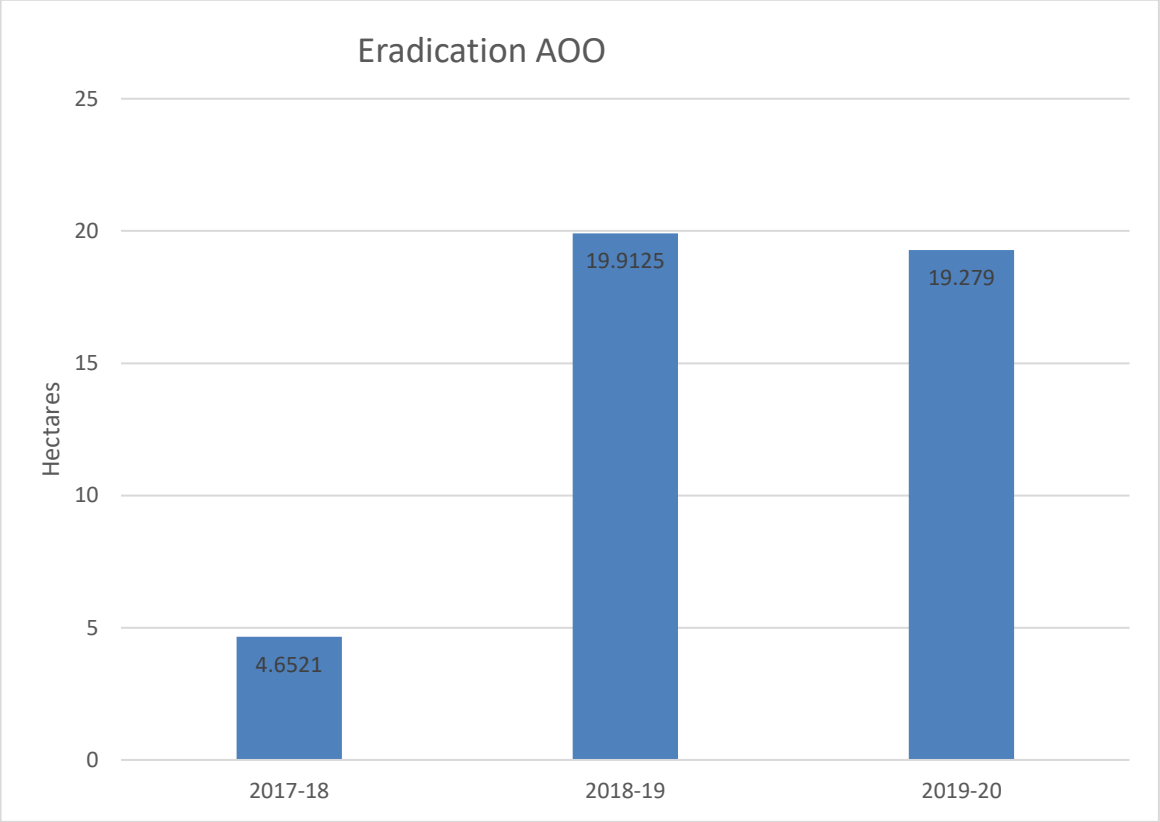


Graph 1: Historical tracking of Eradication species site zero levels.



Graph 2: Plant area of all Eradication species.

12. Progressive Containment pest plants - mapped

12.1. Where population levels, or difficulty and expense of control prevent achievement of a region-wide zero-density objective, high-threat pest plant species are considered for management under a Containment objective. Managing a species to a Progressive Containment goal involves reducing the geographical distribution of these pests within the region over time. As total eradication is not a cost-effective solution it is feasible to prevent spread and limit the effects these pests have on values in some locations. Coordination with other councils and central government agencies is a key component of success. For each species managed in this way, an Active Management Zone (AMZ) is defined within which the pest plant species will be controlled wherever it is found, as per the Eradication designation. The programme aim is to contain over time these species to the Good Neighbour Process Zone (GNPZ) identified for reduce adverse effects on the environment.

12.2. The goal is to work towards eradication in vulnerable areas of high value against infestations where success is feasible but not working in other areas means they 'fill up'. This creates two challenges – the view of unmanaged dense infestations becoming the norm to the community and which increases the effort required in areas where it is feasible to work. Spill-over of seeds from these areas into the AMZ can be managed with more intensive surveillance along the edge of the zone but it means we are likely to achieve suppression rather than total removal from AMZs.

12.3. As noted in the Eradication section, reliance on external partners and other programme factors need to align for success to be achieved against pest plants. Many of our target species are managed towards what may be termed aspirational goals, however community support and a desire to contain the more damaging risks to our region keep these programmes going. During the development of the RPMP, Horizons modified AMZs for a number of species due to the adjusted work programmes of other agencies. In future, we may need to reconsider where we work based on the inability to control spread and this would impede our ability to achieve the Plan goals.

12.4. Horizons assumes the management responsibility for all locations on ratepayer land in the region for plants in this designation. Crown or territorial organisations have their own programmes against three of the 11 species (RPMP pages 10-13).

Summary

12.5. Our assessment, based on available information, is that nine of 11 species in the Progressive Containment – mapped category are on track to reduce their respective AMZs to zero levels. The two species which are unlikely to meet their RPMP objectives are evergreen buckthorn and old man's Beard (OMB). Those proving problematic are due to the number of sites increasing, requiring greater resourcing to achieve the objectives.

13. Summary table

Table 5: Progressive Containment - Mapped species summary

Species	Effort required to reach objective	Notes	Infestation status	
			Extent of occurrence (ha)	% of all sites at zero levels
Banana passionfruit	Increase in budget and staff resource	Due to spill-over from GNPZ, neighbouring regions and sites in difficult to control locations as well as partner organisations' prioritisation	787 ha	68%
Boneseed	Status quo		138 ha	100%
Darwin's barberry	Status quo	Reliant on DOC; long-standing programmes are ensuring success.	4,700 ha	65%
Evergreen buckthorn	Increase in budget, staff time, to decrease AMZ	Difficult to find as seed dispersed by birds and mixed with other vegetation over a large area. Hot spots of Levin, Waitarere Beach and Whanganui rural areas. Surveillance post-RPMP designation has revealed a larger regional burden.	106	75%
Grey willow	Status quo	Collaborative programme including two regional councils, Genesis Energy and New Zealand Forest Managers.		
Moth plant	Status quo		3 ha	92%
Old man's beard	Increase in budget, re-prioritisation of work areas and acceptance of suppression as opposed to all AMZ at zero levels.	See report to Strategy and Policy Committee, 10 March 2020.	28,000 ha	76%
Pest conifer species (4)	Status quo	Recent support from the National Wilding Conifer Control Programme has advanced the programme and is assisting us to achieve our goals.	36,000 ha	70%

Examples

13.1. Old man's beard is an example of a Progressive Containment mapped plant. The OMB programme has recently been reported to Council and the challenges relating to success measures against Progressive Containment targets discussed, (**Old man's beard management in the Horizons Region, Strategy and Policy Committee, 10 March 2020**). This is similar for a number of Progressive containment species where the good

work of removing populations within the AMZ is countered by the presence of uncontrolled populations in the public eye outside of the AMZ.

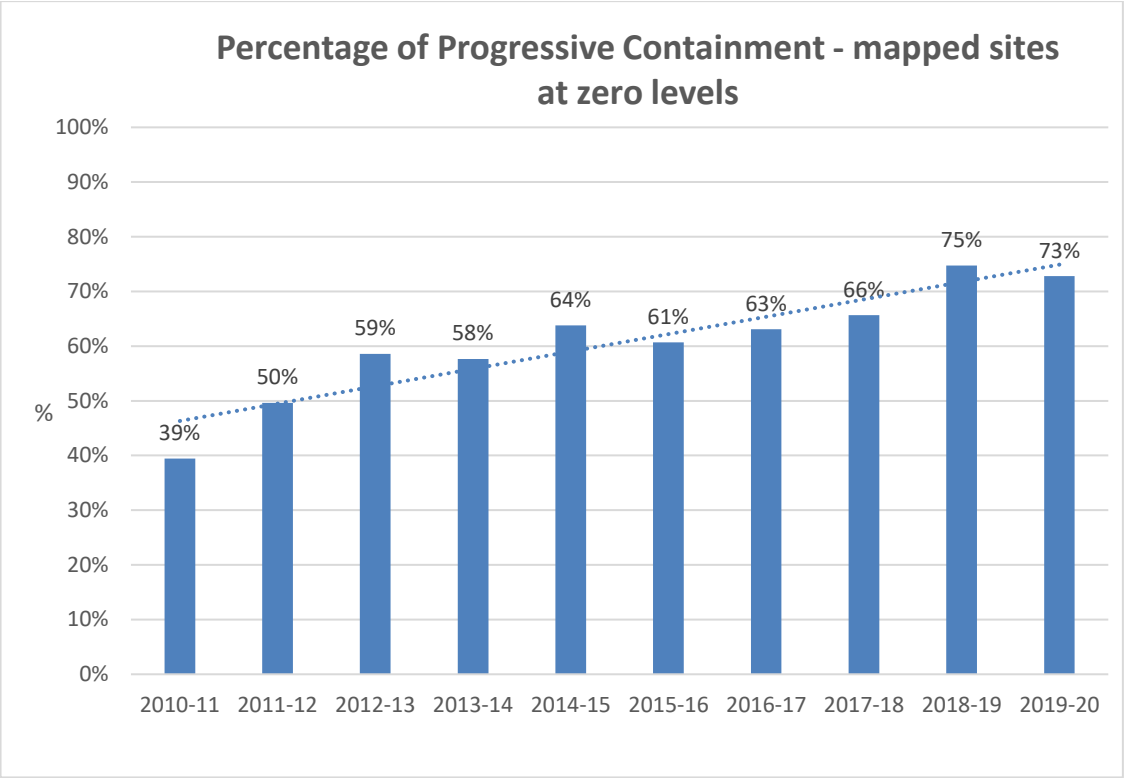
13.2. Another example is the recently reported pest conifer suite of species that Horizons has been actively managing for a number of years. (**National Wilding Conifer Control Programme, Regional Council, 22 September 2020**). The extent of occurrence is vast but the programme is on track to achieving its goals. This programme has a mix of traditional and innovative surveillance and control tools at its disposal and aligned partner organisations, meaning full landscape control is achievable. It has resources from Horizons ratepayers and recently from the National Wilding Conifer Control Programme that allow fully-funded operations.

Image 3: Basal treatment of *Pinus contorta*, upper Rangitikei River Catchment.

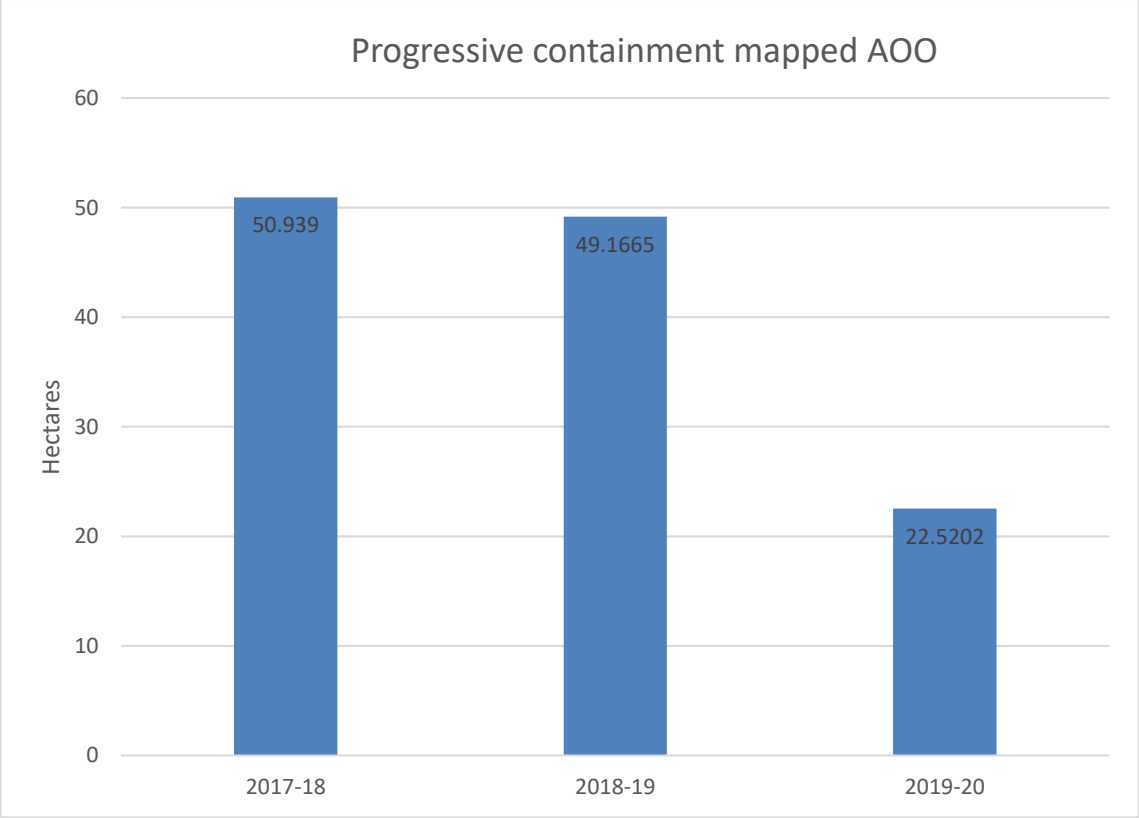
13.3. The latest data from Horizons' site recording system shows that 73% of the 2,719 sites we manage are at zero levels. Those we have managed for longer than three years are at 80%.

13.4. A small number of Good Neighbour Process Zone requests for OMB control have been received, with none for the other species.

13.5. The two graphs below show the increasing percentage of sites meeting the objective of zero levels moving from 39% in 2010-11 to 73% in 2019-20, showing solid progress for this measure. The area of the region with Progressive Containment plants decreased from 51 ha in 2017-18 to 22.5 ha in 2019-20, also showing solid progress towards meeting the RPMP objective.



Graph 3: Historical tracking of eradication species site zero levels.



Graph 4: Reduction in plant area over time.

Progressive Containment pest plants – Unmapped

13.6. The Progressive Containment - Unmapped species designation includes Aquatic/Freshwater pest plants and those pests of productive land managed via both Clear Land and Good Neighbour Rules. There are 15 species in this sub-category of Progressive Containment. And while they are generally widespread, some parts of the region are clear of these pests and it is desirable to keep them clear. The clear areas cannot be reliably mapped with the currently available information, hence the name for this group.

13.7. Since the Plan came into effect Horizons has not recorded any activity under the clear land rule.

13.8. Boundary control managed by the Good Neighbour Rule continues at low levels with demand remaining similar to the previous Strategy's boundary rules.

13.9. Freshwater pests are included in the Plan with the aim of controlling new incursions where resources are available. This provision reflects reality where there is a small number of potentially successful operations against target aquatic species. The cost of intervening in the aquatic environment depends on the water body, the size of the pest population, the tools available for control of the pest to enable eradication and other factors such as experienced contractor availability.

Summary

13.10. Our assessment, based on available information, is that 10 of 15 species in the Progressive Containment – Unmapped category are on track to meet their RPMP objective. The five species that are unlikely to meet their objectives due to late discovery and low probability of success are the aquatic pest plant species including eelgrass, egeria, hornwort, lagarosiphon and reed sweetgrass. Challenges with control operations in freshwater environments include restricted methodologies available for use in these environments.

Summary table

Table 6: Progressive Containment – Unmapped species.

Species	Effort required to reach objective	Notes
Australian sedge	Good process and timely communications; and where managed by large occupiers, TLA and Crown via Approved Management Plans these need to be current, monitored and reported on.	Reactive to 'boundary' matters between land owners larger than 4ha.
Blackberry		
Broom		
Field horsetail		
Gorse		
Nodding thistle		
Ragwort		
Tutsan		
Variegated thistle		
Yellow bristle grass		
Eelgrass, Egeria, Hornwort, Lagarosiphon, Reed sweetgrass	Comprehensive and regular surveillance of high-value water bodies as well as affordable and easier to access control tools.	Difficult to achieve eradication due to late discovery and low probability of success. Challenges with control operations in freshwater environments include restricted methodologies available for use in aquatic environments.

Example

13.11. An example of the challenges associated with freshwater pest eradication is the recent. (discovered in 2019) incursion of hornwort into Lake Namunamu. A highly ranked lake for its biodiversity, lake habitat, and community values due to recreation and fishing. A thorough investigation began immediately after the initial discovery by a member of the public. This included a lake vegetation survey, bathometric survey, preparatory consent work and NIWA feasibility report on the likelihood of control success.

13.12. The full lake survey by professional divers revealed hornwort in low to moderate density throughout the whole lake and to a depth of six metres. The consent process for use of herbicide control options provides transparency and assurance correct steps would be taken to satisfy the Environmental Protection Agency (EPA), however it also confirmed the instruments the industry has to deal with aquatic herbicide use are sometimes cumbersome. This exercise highlighted the high cost of control due to the requirement to treat waterbodies in quarters with four separate applications of herbicide to achieve full coverage.

13.13. The project cost of undertaking herbicide application and the other actions required under the permissions, and with the NIWA report not able to provide certainty of success the decision was made to not progress control against hornwort in Lake Namunamu.

Summary

13.14. Overall there are 9 pest plant species that are unlikely to meet their RPMP objectives out of 55 species in the RPMP. Four are terrestrial pest plants, and five are aquatic pest plants which are difficult to achieve eradication with increasingly restricted methodologies treating weeds in freshwater, the significant costs associated with control, and the lower certainty of success.

13.15. Table 6 summarises the categories of pest plants and their likelihood of achieving the objectives set out in the RPMP. The results below are based on available information from surveillance and control activities undertaken by the Pest Plant Team.

Table 7: Summary of species expected management levels.

Potential Level of Success				
Designation	High	Likely	Low	Total
Exclusion	11			11
Eradication	9	7	2	18
Progressive Containment - Mapped	8	1	2	11
Progressive Containment - Unmapped	10		5	15
Total	38	8	9	55

14. Options to address nine species low probability of meeting RPMP objectives.

14.1. There are two main options for Councillors if they wish to increase the probability of meeting the management objectives in the RPMP:

1) Increase the amount of surveillance and control by increasing resourcing from Horizons or others, or

2) Amend the objective in the RPMP.

14.2. Both options have potential costs and further work is required to assess potential increased resourcing requirements to meet the objectives for each of the species through increased control and the potential costs of a plan change.

14.3. If the changes to the RPMP are unable to be achieved under section 100G, then a full review would be required that would entail the six steps of making the RPMP.

14.4. As per Section 1.4 of the Plan and section 100D(1) of the Act, a review of each section of the RPMP must begin within 10 years of this plan being affixed with the common seal of the Manawatu-Wanganui Regional Council. The next planned review will begin in 2027. Such a review may extend, amend or revoke the Plan; or leave it unchanged. Horizons or the minister may initiate a review or amend it under particular circumstances.

14.5. Under section 100D(2) of the Act, Horizons also has the ability to initiate a review of the whole or part of a plan at any other time if it has reason to believe that the plan or part of the plan is failing to achieve its objectives or that relevant circumstances have changed since the plan or part of the plan commenced. There is also the ability for Horizons to make minor changes to the Plan without a review under section 100D of the Act. However, the

Council must be satisfied that the amendment does not have a significant effect on any person's rights and obligations and is not inconsistent with the national policy direction.

14.6. Monitoring the progress of the Plan provides information on how the RPMP is tracking in relation to its objectives to achieve its purpose and if relevant circumstances have changed to an extent that a full or partial review of the Plan is required outside of the statutory timeframes. Particular circumstances where a review of the Plan may be needed include where:

a. There are changes to the Act and a review is needed to ensure that the Plan is not inconsistent with it;

b. Other harmful organisms create problems, or have the potential to create problems;

c. Monitoring shows a significant change in the problems posed by pests or other organisms;

d. Circumstances change to such a significant extent that Horizons assesses that a review would be appropriate.

e. There has been changes with national policy direction that require changes/review.

14.7. Failing the need to review the Plan or part of the Plan under any of the above circumstances, the Plan will be reviewed under the normal statutory timeframes in accordance with Section 100D of the Act.

14.8. As noted earlier in the document, some of the Plan's objectives may not be met, and as such the Plan could be considered for review prior to the scheduled review in 2027 (10- year review). While the review could focus on those parts of the plan needing change (i.e. a review of part of the plan), the review would still be a considerable undertaking, requiring all of the six steps followed in the making of the RPMP 2017-37 to be completed to the extent they are relevant to the part of the plan being reviewed, and reading in any necessary modifications, and likely to compete with other internal policy work.

14.9. The NPD test would be equivalent to the previous tests for inclusion into the RPMP:

1. Setting objectives and use of the programmes.
2. Analysing benefits and costs.
3. Funding rationale/Allocation of costs.
4. Good neighbour rules are described.

14.10. It is unlikely that the changes would be considered minor under section 100G of the Act, as they would be likely to have a significant effect on any person's rights and obligations. However this is difficult to assess until the specifics of the proposed changes are known.

15. SIGNIFICANCE

15.1. This is not a significant decision according to the Council's Policy on Significance and Engagement.

Craig Davey
PEST PLANT COORDINATOR

Rod Smillie
BIODIVERSITY, BIOSECURITY & PARTNERSHIPS MANAGER

Jon Roygard
GROUP MANAGER NATURAL RESOURCES & PARTNERSHIPS

Item 8

ANNEXES

There are no attachments to this report.

Report No.	20-143
Decision Required	

CLIMATE ACTION STRATEGY

1. PURPOSE

1.1. To propose the attached Climate Action Strategy for Council's adoption.

2. RECOMMENDATION

That the Committee recommends that Council:

a. receives the information contained in Report No. 20-143 and Annex;

b. notes that the attached Climate Action Strategy offers a broad approach to guide Horizons' response to climate change;

c. adopts the Climate Action Strategy.

3. FINANCIAL IMPACT

3.1. This advice has no direct financial impact. Decisions on resourcing to support implementation of the proposed strategy will be made through the **Long-Term Plan (LTP)** process.

4. COMMUNITY ENGAGEMENT

4.1. Community engagement is an important element of the strategy proposed. There has been a focus on climate change in Council communications during September, including an issue of *Across the Region*, media releases, social media, and an online survey. Further engagement is possible through the LTP process.

5. SIGNIFICANT BUSINESS RISK IMPACT

5.1. Climate change presents significant risks to our communities and to Horizons' assets and operational outcomes. This paper presents a strategic approach to those issues.

6. CLIMATE IMPACT STATEMENT

6.1. This report presents a strategy to guide Horizons' response to climate change, including objectives in relation to mitigation, adaptation, and regional leadership. If adopted, it will improve the ability of Council to respond proactively and consistently to climate change in our region.

7. BACKGROUND

7.1. Elements of a Climate Action Strategy were outlined to Council in November 2019 (Report 19-179), and discussed further in February 2020. By identifying objectives and a broad approach to action on climate change, the strategy aims to align effort across Horizons' activities and ensure an effective and efficient response. Before providing final advice, staff undertook to seek tangata whenua perspectives.

8. CONTEXT

8.1. With the passage of the Zero Carbon Act 2019, climate change is becoming an increasingly significant feature of our statutory environment. In the last few months, the Resource Management Act has been amended provide for climate change to be considered more fully in regional policy statements, regional plans, and consent decisions. The Resource Management System Review has recommended separate legislation for support managed retreat and climate change adaptation. The Minister for Climate Change has exercised statutory powers to require information from councils and other organisations on climate change adaptation. Audit New Zealand has indicated that integration of climate change into plans will be a focus for the 2021-31 LTP round. Expectations are becoming increasingly clear that councils exercise leadership and actively use the tools at their disposal to respond to climate change.

8.2. Uncertainty about climate change remains – in climate projections and in estimates of risk; in details of Government policy. Nonetheless, the weight of evidence points to a need for decisions to be made now to ensure our communities and environment are able to thrive in the future. These decisions will need to be 'adaptive', enabling us to make adjustments as we learn more on our path towards long-term objectives.

8.3. Locally, we have made progress in a number of areas over the past year. The region's councils have built on their 2019 Memorandum of Understanding, agreeing to establish a joint Climate Action Committee to coordinate effort. Climate impact statements are now being included in all advice to Council to ensure opportunities for action are not overlooked. A regional **greenhouse gas (GHG)** inventory has been completed and a regional climate change risk assessment (funded through the 2020/21 Annual Plan) is underway. Horizons has adopted a reduction in GHG emissions associated with its activities of 30 percent by 2030 as an interim target. These initiatives all align with the proposed strategy and provide the foundations for its implementation.

9. DISCUSSION

9.1. Work on our Climate Action Strategy was disrupted by the Covid-19 pandemic; engagement with iwi was only able to get underway in late May. Since then, we have been in touch with iwi leaders across the region. Where we have been able to meet, we have found general support for our intent. Discussions have been constructive and have led to improvements to our proposed approach.

9.2. The proposed Climate Action Strategy is attached at Annex A. Objectives remain largely as indicated last year. We see Horizons' role as facilitating an effective, constructive response to climate change in our region. This means in particular:

- Building the resilience of communities and our environment to the effects of a changing climate;
- Supporting the transition to a sustainable, carbon-neutral regional economy by 2050; and
- Ensuring central- and local-government efforts are aligned to the needs of our region.

9.3. These objectives align with the outcomes we are seeking to achieve. Public and academic discourse often focuses on 'mitigation' (reducing or offsetting emissions) and 'adaptation' (preparing to live with a changing climate): both will be necessary as we implement our strategy.

9.4. Our proposed approach in pursuit of objectives has evolved since early advice was offered to Council last year. This reflects dialogue with iwi and other groups. The proposed strategy acknowledges that climate change touches everything we do as a regional council – but that Horizons alone cannot achieve the outcomes we seek. Relationships – with

other groups, and between people and the environment – are essential to our response. With this in mind, we recommend that Council commit to:

- Working together toward shared outcomes;
- Involving local communities in decisions that affect them;
- Sharing what we know, being open about what we don't;
- Supporting people to make a difference;
- Considering the climate in everything we do;
- Prioritising the most vulnerable;
- Remaining open to new information and ways of doing things; and
- Acting now, with future generations in mind.

9.5. This approach reflects good practice in tackling complex issues like climate change. It also reflects the expectations as we understand them of iwi, activist groups, and the wider community. As a simple set of clear principles, it can be applied to decisions in different contexts and will remain relevant as our work programme develops.

10. CONSULTATION

10.1. A draft of the strategy has been shared with iwi and hapū, and with territorial authorities.

11. TIMELINE / NEXT STEPS

11.1. Council will have the opportunity to consider priorities and resourcing through the LTP process. Staff will develop an implementation plan as the LTP takes shape.

12. SIGNIFICANCE

12.1. This is not a significant decision according to the Council's Policy on Significance and Engagement.

Tom Bowen
PRINCIPAL ADVISOR, STRATEGY & POLICY

ANNEXES

A Climate Action Strategy

Climate Action Strategy

September 2020

horizons
REGIONAL COUNCIL

Author
Tom Bowen

Front Cover Photo
Horizons Regional Council

September 2020

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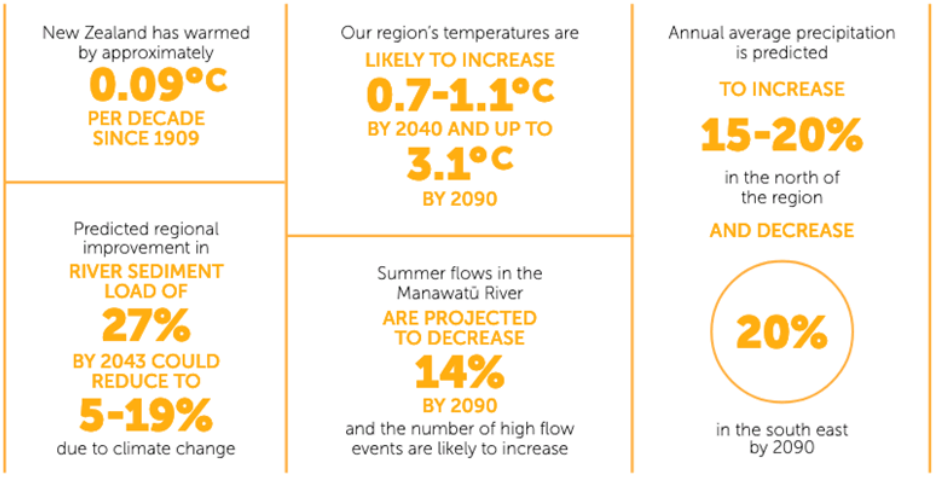
We share a vision for a healthy environment and thriving, resilient communities. Realising that vision demands that we take action on climate change.

Climate change may be the biggest environmental challenge we face. It will affect ecosystems, the economy, and our way of life. Tangata whenua are already noticing the subtle changes in seasonal rainfall, species migrations and bloom times: they will feel the impacts of climate change deeply because of their enduring connection to land and water.

Over the coming decades, our region is likely to see both longer dry spells and more intense rainfall. Stormier weather will exacerbate erosion in the hill country and on the coast. Rivers will flood more often. In a warmer climate, threatened species may struggle to survive while pest species thrive. These changes are happening now.

Concern about climate change is growing. Protest movements, public submissions, discussions with community groups and our iwi partners all show us that local people want to see action. We need to prepare for a future that is different from today – and we must do so with urgency.



CLIMATE CHANGE THROUGH THE EYES OF A TUNA

As the climate changes, so will the lives of taonga species. Tuna (eel) are a particularly iconic species in Aotearoa. They can live as long as a human, can travel across land, and make two long ocean migrations during their life cycle. They are connected to tangata whenua through whakapapa, they are mentioned in stories and some have been regarded as kaitiaki. They are important to local people, not only as a food source, but also as an expression of manaakitanga (hospitality) offered to guests.

Most people encounter tuna in creeks and lakes, where they spend most of their lives. These freshwater bodies are likely to be affected by both heavier rain and longer dry periods as the climate changes. Heavier rain washes more sediment into rivers: the water can become murkier and the bottom muddier, making it easier to hide but harder to find food. If there's enough sediment in the water, it can damage sensitive gills. Rain also carries nutrients into the water. This encourages the growth of aquatic plants – especially if the rain is followed by warm, settled periods of weather, as we expect with climate change. Some plants are good, but too much algae can smother the stream bed and affect the abundance of the bugs and small fish that tuna eat. The longer and warmer those summer dry periods, the less water in the river and the less habitat will be available. There's another problem, too – fish need oxygen just as we do, and there's much less of it in warm, stagnant water. This means that, in a drought, fish may actually suffocate.

After many years in our rivers and lakes, tuna travel thousands of kilometres into the Pacific Ocean to spawn. Nobody knows exactly where they go or how they find their way there — but it's fair to assume that ocean currents and temperatures will be important for their breeding cycle, and for the successful return of juveniles to Aotearoa.

Tuna, like people, are a resilient species. Nonetheless, a changing climate will present them with challenges that may impact on their future wellbeing. Taking a look at the world through the eyes of a tuna challenges us to consider environmental issues differently, taking a little time to reflect on what climate change may mean for them and other species. Generally speaking what is good for the tuna, is good for the people.

Our wellbeing depends on the environment, and our actions impact on the environment. There is perhaps no clearer demonstration of this relationship on a global scale than climate change. Our response must recognise this reciprocity, both reducing our impact on the environment and responding to a changing climate.

OUR REGION'S GREENHOUSE GAS EMISSIONS

On a per capita basis, our region's emissions are slightly above the national average (about 24t CO_2-e, compared to about 17t CO_2-e). The region's emissions fell by 2 percent over the 2007-18 period – slightly faster than the national average.

Most emissions in our region (around two-thirds) are from livestock agriculture – however, these emissions fell by about 7 percent over the decade 2007-18.

Emissions from other sources have been increasing, reflecting a growing population. Energy use is the region's second biggest source of emissions, with the main component being transportation.

As a region, a relatively small proportion of our emissions are offset by forestry (about 18 percent, compared to a national average of 30 percent). The exception to this pattern is Ruapehu District, where most emissions are offset by 'removals' through forestry.

REDUCING OUR IMPACT: MITIGATION

Mitigation means reducing the amount of greenhouse gases we put into the atmosphere. A certain amount of change is locked in, due to past emissions – but we can limit future impacts by reducing emissions from now. The Paris Agreement seeks to limit temperature increase to 1.5-2.0°C above pre-industrial levels. Global temperatures have already risen by 0.8-1.0°C, so the window to respond is closing quickly.

New Zealand's national targets align with the Paris Agreement goals. They require us to:

- reduce net emissions of all greenhouse gases except biogenic methane (methane emissions from waste and agriculture) to zero by 2050; and
- reduce emissions of biogenic methane to 24–47 per cent below 2017 levels by 2050, including to 10 per cent below 2017 levels by 2030.

Each individual, household, organisation, and industry will need to make changes if we are to meet these targets.

In line with national targets and our shared responsibility, Horizons has adopted a reduction in greenhouse gas emissions associated with our organisation's activities of 30 percent by 2030 as an interim target. We are undertaking work to better understand our emissions profile and opportunities to make reductions or enhance offsets to meet this target and inform further action.

RESPONDING TO A CHANGING CLIMATE: ADAPTATION

Adaptation means modifying the way we do things to reduce the impact of a changing climate on us. Although it's not entirely clear how climate change will affect our communities, we can be sure that things will change. We also have a good idea of the sorts of impacts to expect.

The climate affects where it's safe to live, infrastructure (like roads and water pipes), jobs, food supply, health, cultural practices and recreational activities. Some of these impacts will be minor; others will be challenging for us to manage – but they will also present opportunities if we are able to respond proactively and collaboratively.

REGIONAL ACTION

Horizons acknowledges Te Tiriti o Waitangi and the place of tangata whenua in local decision making. We are committed to upholding the Treaty's principles of partnership, protection, and participation as we respond to climate change. We will work through what this looks like in practice together with iwi and hapū.

Horizons' role is to promote the social, economic, environmental, and cultural wellbeing of communities – now, and for the future. The potential impact of climate change on future wellbeing makes it relevant to everything we do.

Climate change calls for leadership at a local and regional level. Horizons is a signatory to the *Local Government Leaders' Climate Change Declaration*, as well as a Memorandum of Understanding with other councils in our region. These documents commit us work together to reduce greenhouse gas emissions and improve resilience to the effects of a changing climate. To help us do so, we have agreed to establish a joint Climate Action Committee with representation from each of the region's eight councils as well as iwi involvement.

OUR OBJECTIVES

Everybody has a role to play in responding to climate change – central government, local councils, tangata whenua, community groups, businesses and individuals. At Horizons, we see our role as facilitating an effective, constructive response to climate change in our region. We aim to:

- Build the resilience of communities and our environment to the effects of a changing climate.
- Support the transition to a sustainable, carbon-neutral regional economy by 2050.
- Ensure central- and local-government efforts are aligned to the needs of our region.

OUR APPROACH

Horizons cannot achieve these outcomes alone. We recognise that we must cooperate and support the work of others to ensure our environment and communities continue to thrive. We will do this by:

- Working together toward shared outcomes
- Involving local communities in decisions that affect them
- Sharing what we know, being open about what we don't
- Supporting people to make a difference
- Considering the climate in everything we do
- Prioritising the most vulnerable
- Remaining open to new information and ways of doing things
- Acting now, with future generations in mind

DEALING WITH UNCERTAINTY

We cannot know exactly what the future will bring – it depends on future emissions, new technologies, community responses, and complex global environmental processes. There is uncertainty in the science and in estimates of the risks. There are competing ideas about what should be done.

Nor can we afford to wait. Decisions must be made now to manage the transition to a low-emissions economy and ensure our communities thrive in a changing climate. These decisions will need to be 'adaptive', enabling us to progress towards agreed long-term objectives and make adjustments as we learn more or circumstances change.

WHAT WE ALREADY DO

Many of Horizons' existing activities take climate change into account. It is identified as an issue in both the One Plan and our Infrastructure Strategy. Core functions like flood protection and land management provide a starting point for an action plan that will evolve as we better understand risks and opportunities, and reach agreement on what needs to be done.

Resource management: managing the use of natural resources and effects of development on freshwater, land, air and the coast; avoiding further risks from natural hazards, and supporting renewable energy generation.

Sustainable land and riparian management: supporting the fencing and planting of riparian margins and sustainable land use in erosion-prone hill country.

Biosecurity: regional pest management to minimise the adverse effects of plant and animal pests on indigenous biodiversity and habitat and on the regional economy.

Biodiversity: protecting and enhancing the region's indigenous biodiversity through active management of priority sites, monitoring, and support for community and landowner action.

Transport: regional land transport planning and public transport services across the region, including low-emissions and active transport options.

Hazard and emergency management: working with territorial authorities and other agencies to reduce the risk of hazards, raise awareness, maintain readiness and provide response and recovery capabilities.

Flood protection and river control: protecting people, property and infrastructure from flooding by containing floods, building and maintaining drainage infrastructure, and reducing the effects of river erosion.

Information, research and monitoring: collecting reliable environmental data and carrying out research, and ensuring its availability within and outside Horizons, as a basis for the development of sound policies and actions.

Strategic management: providing proactive, coherent policy responses across the organisation on emerging and ongoing issues; engaging with central government and other regional councils to ensure national policy reflects local realities, and that the right tools are available to achieve change.

Council operations: incremental changes to improve energy efficiency and reduce carbon emissions from our offices and vehicle fleet.

From September 2020, we are making changes to ensure that decisions across all Council activities consider climate impacts.

WHAT'S NEXT

This strategy provides a framework to guide Horizons' response to climate change. During the July 2020 – June 2021 year, we will focus on three key initiatives:

Climate Action Committee: a joint committee is being established to ensure an effective local-government response for our region. Its first meeting is planned for December 2020.

Regional Climate Change Risk Assessment (RCCRA): together with territorial authorities and tangata whenua, we are working to identify risks to local communities, significant sites, and our environment, to inform decisions about which issues to tackle first.

Corporate responsibility: we will work to better understand our own carbon footprint and identify options to reduce our emissions by 30 percent by 2030.

Decisions about our programme of work and resource commitments beyond June 2021 will be made through the 2021-31 Long-Term Plan process. This will be informed by the RCCRA, evolving government policy, and consultation with communities, and further discussion with iwi partners.