



BIODIVERSITY

1 ACTIVITY OVERVIEW

- 1.1.1 Manawatū-Whanganui Regional Council (Horizons) has statutory obligations to maintain and sustainably manage the Region's biodiversity under the Resource Management Act (1991). Horizons' strategy is in the One Plan and includes both regulatory and non-regulatory approaches. This item reports on the non-regulatory biodiversity programme.
- 1.1.2 Horizons' Biodiversity Team works closely with other council teams and external organisations to enhance biodiversity and engage the community in biodiversity enhancement. This work is supported by research, additional labour and monitoring undertaken by the Horizons' Science & Innovation and Biosecurity teams, along with other agencies, to prioritise and focus implementation efforts. This item reports on the collective biodiversity activity of the implementation and science programmes. It is noted that other non-regulatory programmes, particularly the freshwater programme, also contribute to biodiversity outcomes.
- 1.1.3 A key challenge in biodiversity management is allocating resources in a way that provides the greatest ecological benefit. This has been a significant area of focus within the biodiversity programme review. The review aims to improve processes and subsequent biodiversity outcomes across the Region, while working to bring Horizons closer to meeting requirements under the proposed **National Policy Statement for Indigenous Biodiversity (NPSIB)**. The proposed NPSIB requires councils to identify areas where there is significant vegetation and habitats of indigenous fauna, and to manage their protection through plans and consent processes under the **Resource Management Act (RMA)**. National policy direction is changing with government signaling the release of the National Biodiversity Strategy later this calendar year. The NPSIB has been delayed due to Central Government's COVID-19 response and is now expected in April 2021. These documents will influence the way that Horizons manages biodiversity within the Region.

- 1.1.4 Work across the non-regulatory biodiversity programme supports the goal for the priority sites to *“maintain or restore the full range of the Region’s indigenous ecosystems to a healthy and functioning level”*.
- 1.1.5 Biodiversity Activity is presented regionally (where appropriate) and/or for each of the programmes that make up the Non-regulatory Biodiversity Programme, integrating the implementation work of the Biodiversity team and the activities of the Science & Innovation and Biosecurity teams. This includes:
- The regional activity update and progress against Annual Plan targets;
 - The priority biodiversity sites programme, a site-led programme working with landowners to maintain and enhance priority sites on private land;
 - The biodiversity partnerships programme, where projects extend beyond the boundary of a single landowner and/or involve community groups or external agencies; and
 - Management of Tōtara Reserve, our Regional Park.
- 1.1.6 A significant component of our recent activity has involved Jobs for Nature applications. These applications aim to provide employment opportunities with biodiversity enhancement outcomes, including Iwi Environmental Management Plans, Regional Biodiversity Enhancement, Kia Whārite Expansion, and have supported two projects proposed by the Unenuku Charitable Trust for the Pōkākā Eco-sanctuary Trust in Ruapehu District.

2 ANNUAL PLAN TARGETS

- 2.1.1 Progress against the Annual Plan targets for the 2020-21 year are shown in Table 1 below. Overall, the programme met three out of five targets
- 2.1.2 The annual targets for new bush and wetland sites that are actively managed have not been met. Much of the activity in this programme occurs in the final quarter of the year and COVID-19 restrictions resulted in planned work at many priority sites not being completed. The results are further discussed in the subsequent sections.
- 2.1.3 The target for support of community biodiversity projects was well exceeded with 27 projects supported for a target of 12.
- 2.1.4 The annual report targets for Tōtara Reserve and the Biodiversity Monitoring and Research were reported in the Science & Innovation June Environment Committee report and are outlined here in Table 1.

Table 1 Progress reporting for the Biodiversity Activity Annual Plan targets for 2019-20.

Long-term Plan Target	Target	Allocated	Completed or supported	% of target completed
Protect/enhance priority habitat remnants				
Additional top 100 wetlands actively managed	4	2	2	50%
Additional top 200 bush remnants actively managed	7	5	2	29%
Support community involvement in biodiversity protection				
Support existing community-based biodiversity improvement projects	12	29	27	225%
Tōtara Reserve Regional Park				
Annual report on the management of Tōtara Reserve Regional Park for biodiversity and recreational values, including managing the camping facility.	1	1	1	100%
Science & Innovation - Biodiversity Long-term Plan targets for 2019-20.				
Performance Measures for Levels of Service	Target 2019-20	Target achieved	Progress update	
Annual report on biodiversity monitoring and research activity.	1	1	This year's annual report on biodiversity research activity was presented to Council in the June 2020 Environment Committee report.	

3 PRIORITY SITES PROGRAMME

3.1 Programme overview

3.1.1 The Priority Biodiversity Sites Programme is a site-led programme aiming to maintain or restore the full range of the Region's indigenous ecosystems to a healthy and functioning level. Staff identify and assess priority sites for their eligibility for management. Once eligible, staff work alongside the landowner and sometimes the QEII National Trust to manage sites by interventions such as animal exclusion and pest plant control.

3.1.2 The biodiversity activity has been through a review involving developing a prioritisation process to identify and select sites for further management. Once selected from site summary information, site management prescriptions are written and costed, and will be added to the prioritisation list for work that is required at management sites. The budget available for this

work will then be allocated according to the assessed priorities. A paper will be presented to Council in September/October on the new goal to maintain or restore the full range of the Region's indigenous ecosystems to a healthy and functioning level and the approach to working toward this goal via this year work programme.

3.2 Activity Update

IDENTIFYING AND ASSESSING SITES

- 3.2.1 **Rapid Ecological Assessments (REAs)** involve visiting a site to collect inventory data on the ecosystem types present and the threats that would need to be managed if the site was included in the Priority Sites Programme. As well as increasing our knowledge of remaining biodiversity in the Region, REAs identify sites that are eligible for management in the following year.
- 3.2.2 To create the list of sites outlined for REAs in the coming year, a subset of regionally critically endangered ecosystems has been shortlisted based on four factors: predicted remaining habitat, extent of habitat decline, area of remaining habitat in the conservation estate, and proportion of remaining habitat outside conservation estate. Sites identified by prioritisation modelling from these shortlisted ecosystems will be targeted for REAs in the coming year. By being selective about the location of next year's REAs, we are targeting the most threatened sites for management in the 2021-22 financial year.
- 3.2.3 For the 2020-21 financial year the Biodiversity Team has set a target of undertaking 80 REAs. The list of 150-200 potential sites is considerably greater than the number of REAs expected to be completed, allowing for redundancy due to factors such as lack of access.
- 3.2.4 The operational goal for 2019-20 was to complete 100 REAs. The annual total at the end of June was 191 REA visits. This included: 46 sites which were found to be inconsistent with results of prioritisation software, 17 updates of expired REAs, and 128 new REAs being completed. During May-June the Biodiversity Team visited five sites that the prioritisation model had flagged as potentially important. Of the five sites visited, three site visits were updates of expired REA and the results for the two new sites have been added to the table below at management level 1.
- 3.2.5 Table 2 below provides a summary of the management level index status for all sites on the managed list to the end of June 2020. The current assessment identifies that 10 sites are at management level 4, i.e. have been assessed and priority works are being carried out as required.

Table 2 Priority Sites Management Level Index (0.5: site may have received management from Horizons but has not been assessed, 1: REA completed within the last 10 years, 2: site has received Horizons contribution to management, 3: site receives ongoing management input from Horizons, 4: site receives a higher level of management inputs, 5: receives significant inputs from stakeholders, 6: receives management inputs for all animal pests.

Management level	Bush sites	Wetland sites	All sites
6	1	0	1
5	1	2	3
4	7	3	10
3	38	14	52
2	100	52	152
Sub-total for Level 2+	147	71	218
1	350	66	416
0.5	4	6	10
Total	501	143	644

SITE MANAGEMENT IN 2020-21

- 3.2.6 Management actions in the 2020-21 year are being prioritised to fit the available budget through a process that is focusing firstly on sites currently at Management Level 3 and above. The process includes all of these sites having full site summaries and management prescriptions prepared. These: a) identify ecological integrity targets, b) identify pressures required to be managed to meet targets and c) develop prescriptions and indicative cost information to reduce pressures to required levels over a five-year period. Costings are based on prescriptions designed to restore ecosystem function and viability, not to maximise populations of charismatic species or ensure the persistence of threatened species. Where charismatic or threatened species are present it may be appropriate to provide additional management in collaboration with the Department of Conservation. The site summaries and management prescriptions are currently in development in advance of prioritising the budget spend.
- 3.2.7 A paper on the review of this programme and the proposed approach for this year and beyond is in preparation for presentation in September-October.

4 BIODIVERSITY PARTNERSHIPS

4.1 Programme Overview

- 4.1.1 The Biodiversity Partnerships Programme funds biodiversity-related projects that extend beyond the property boundary of a single landowner and/or involve community groups or external

agencies. The programme has evolved over time and is currently being reviewed. The current suite of projects includes target sites or areas with environmental, social and cultural values.

- 4.1.2 The 29 projects approved in 2019-20 were made up of seven Biodiversity Collaborations, 13 Community Biodiversity Projects and nine Community Grant Projects. Further information on these projects is provided in the Natural Resources and Partnership Group's Operational Plan 2019-20 (pages 59-65 and below in summary).

4.2 Programme Activity

SELECTION OF PARTNERSHIP PROJECTS

- 4.2.1 A paper and associated workshop outlining the non-regulatory biodiversity work and seeking the Council's guidance around the biodiversity partnerships programme was presented to the Strategy and Policy Committee in February 2020. As a result of the review, paper, and council workshop, changes were made through the Annual Plan budget to increase staff capacity to further support community engagement and mobilise community members around biodiversity. The Committee also provisionally agreed to support changes to the funding structure so the biodiversity partnerships programme can enable a more contestable approach to the funding of community projects supported by clear assessment criteria. There was additional consideration and discussion about the potential to leverage available funding to actively seek external funding opportunities to assist with biodiversity enhancement projects, including collaborative projects with other agencies and communities.
- 4.2.2 A paper has been prepared for the Strategy & Policy meeting in August that seeks Council's decisions on implementing the approach this year including the allocations of funding for projects. The section below provides some updates on the projects undertaken in the 2019-20 year.

COMMUNITY ENGAGEMENT

- 4.2.3 Community engagement is a priority, and through the 2020-21 Annual Plan process Council resolved to fund an additional position to add capacity and grow the current programme of community participation in biodiversity projects across the Region.
- 4.2.4 During June the Communications and Biodiversity/Science & Innovation teams ran a two-week social media campaign #horizonshabitats. This highlighted Councils work in biodiversity protection and management including links with Biosecurity, Freshwater, SLUI, work with community groups, information on regulatory and non-regulatory programmes, with a focus on some of the priority sites work that the team carries out. The campaign reached approximately

33,000 Facebook newsfeeds and more than 1,500 people were engaged with e.g. they reacted to the post (liked etc.), shared the post or commented on it.

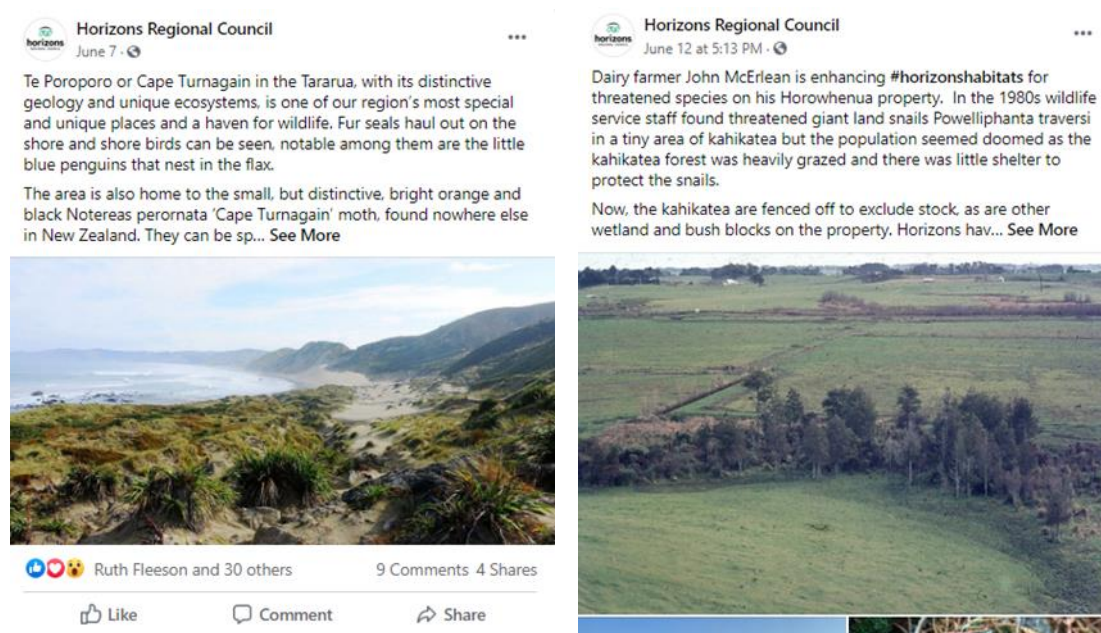


Figure 1: Two of the #horizons habitats social media posts during a recent two-week biodiversity campaign.

4.3 Project Updates – 2019-20

This section provides updates on the activity of the projects funded in 2019-20. Overall, the programme exceeded the target of 12 by supporting or completing 27 projects.

KIA WHĀRITE

- 4.3.1 During 2019-20 predator trapping continued in the Rētāruke, Manganui o te Ao, and Whanganui River Catchments for whio (blue duck) protection and in the Waimarino area for North Island brown kiwi protection. Ground and aerial goat control operations were also undertaken in the Waimarino area. Horizons' activity for this year has been contracted and is underway.
- 4.3.2 The **Department of Conservation (DOC)** is currently undertaking a review of the Manganui o te Ao whio security site to refine the requirements for ongoing protection and enhancement of this taonga species. The review will include consideration of DOC's ongoing funding of the project. An update of the review will be provided to Council later this year.

RANGITIKEI ENVIRONMENT GROUP (REG)

- 4.3.3 **Old man's beard (OMB)** was the main focus for REG and work was split between urban, rural and public reserves. In rural areas, REG encourages and assists OMB self-help groups with control works. In the 2019-20 year an additional self-help group was funded.

WEEDBUSTERS PALMERSTON NORTH

- 4.3.4 Lockdown prevented our contractors completing some of the weed control work. Unsuitable conditions and competing demands on their time following lockdown meant the programme was not fully delivered this year.

TAWATA MAINLAND ISLAND

- 4.3.5 After a year of no work being carried out due to changing personnel at Tawata Whanau Trust, work has resumed in the sanctuary area with bait stations filled for possum and rat control, and goat control undertaken to allow the continued regeneration of the forest. The COVID-19 lockdown curtailed activities. Overall \$17,400 of the \$50,000 allocated was spent on the project. The Trust is very keen to progress this project and is reviewing and updating their operational plans to move forward successfully.

WAITARERE BEACH COMMUNITY PROJECT

- 4.3.6 Weed control work on this project bucked this year's trend with a higher-than-usual work programme exceeding the annual budget and managing to spend a significant portion of the project reserves of approximately \$14,000. This additional work was undertaken as in previous years the full budget had not been utilised.

PŪKAHA MOUNT BRUCE

Currently, the budget for this project covers animal pest control only and this work was necessarily suspended during lockdown. For several years, Biodiversity staff have advocated for the advisory group at Pūkaha (including DOC and Greater Wellington Regional Council) to address the pest plant issue in and around the reserve and DOC have now agreed to this. Pest plant control in the buffer zone (which includes some privately owned native forest) has previously been funded through the priority sites programme. Weed control at this site may potentially be funded by the priority sites project (depending on how the work ranks against other priorities). The project may also apply to the contestable fund for biodiversity partnerships in future years.

TE ĀPITI MANAWATŪ GORGE

4.3.7 A Governance Group meeting was held via Zoom during lockdown and the following points summarise the discussions:

- As contractors would not be allowed onto the site until Level 2 of the COVID-19 restrictions, some work was not completed last financial year and some funding will be carried forward.
- The Governance Group submitted on the new gorge road process, culminating in Horizons proposing, through its Annual Plan, additional funding for pest plant and animal control, and the **NZ Transport Agency (NZTA)** committing further money to enable animal pest control to be carried on the northern side of the site.
- Two launches were held late last year for Michelle Frey's history of the Manawatū Gorge, *Te Āpiti Manawaū Gorge Te au-rere-a-te-tonga* and more than 800 copies had been sold at the time of writing. A further book launch is planned for 6pm on 18 August at the Ashhurst School.
- The updated Terms of Reference were approved in principle, providing the process to be followed regarding additional iwi group membership.
- NZTA gave an update on the new gorge road process and will provide regular updates to the Governance Group.
- **Central Economic Development Agency (CEDA)** representatives presented on the Tourism Opportunities report and the Tourism Destination Plan.
- PNCC provided an update on the Master Plan and discussion on how to coordinate or align various plans for the area – the other two being a destination plan by DOC and an NZTA plan that relates to Te Āpiti. The Master Plan is expected to be presented to the Governance Group for consideration later this year.
- The 2020-21 year includes a significant new pest control programme aiming to control pests over both sides of the Te Āpiti site. The new work will deploy a full network of bait stations across the site and a predator trap perimeter around both sides of Te Āpiti. The project involves Horizons, NZTA, DOC and iwi, and will provide increased protection for the wildlife present.

TE PŌTAE O AWARUA PREDATOR CONTROL

4.3.8 Horizons' funding supported the Aorangi Awarua Trust with the costs of servicing remote trap lines on their land and also with the cost of transporting volunteers from the Ruahine Whio

Protectors to service the trap lines on public land. This project of servicing predator traps in a remote location supports and enhances a large whio and kiwi protection project on the adjoining DOC estate in the Northern Ruahine Forest Park.

MASSEY HILL

- 4.3.9 In the 2019-20 year only 70% of the planned weed control work was completed due to the lockdown.

TURITEA RESERVE

- 4.3.10 Horizons provided funding assistance for pest animal control and monitoring within the reserve. Encouraging monitoring trends for pest levels and bird recovery led to a proposal to reintroduce North Island robin to the reserve. This was scheduled to occur in March 2020, however due to the COVID-19 lockdown it has been re-scheduled to spring 2020.

BUSHY PARK

- 4.3.11 Horizons contributed to pest control within Bushy Park, near Whanganui, including staff from our Biodiversity and Science teams assisting the Bushy Park Trust by spending a day servicing rodent monitoring lines through the forest. Horizons supports the Trust with a financial contribution of \$20,000 for ongoing pest control.

KAHUTERAWA STREAM BIODIVERSITY RESTORATION

- 4.3.12 Horizons contributed to revegetating the stream corridor with eco-sourced native plants and removing willows. The new walkway/cycle way between Palmerston North and Linton passes through the project area and the revegetation work has made a positive contribution to making the route popular with Manawatū residents.

FOXTON RIVER LOOP

- 4.3.13 There was no spend on this project this year. The Foxton Futures project for work in relation to the loop was recently announced.

MANAWATŪ ESTUARY

- 4.3.14 Predator control in and around Fernbird Flat continued this year but was suspended during lockdown. Horowhenua District Council, the Department of Conservation and Horizons Regional Council held regular workshops outside of the scheduled Estuary Management Team meetings to better align each organisation's work. With the support of Horizons and DOC, Horowhenua District Council were successful in their application to the One Billion Trees fund

for a planting project at the northern end of the site and all three organisations will work together to implement it.

AWAHURI FOREST – KITCHENER PARK

- 4.3.15 In 2019-20, Horizons' contribution to this wetland forest reserve went towards enhancement planting and willow removal. Horizons' Biodiversity Coordinator is also an Advisory Trustee, with no voting rights, assisting the Trust with ecological matters and planning activities.

AHIMATE RESERVE

- 4.3.16 Horizons supported the Ahimate Reserve community with weed control and maintenance of the native planting this year.

GATE PĀ BUSH RESTORATION

- 4.3.17 Horizons continued to assist by controlling weeds in this bush within the Ōhakea Air Force Base.

ŌHAU BEACH WALKWAY

- 4.3.18 There was no activity in this project this year.

CAPE TURNAGAIN

- 4.3.19 This was the second year of a three-year commitment to a collaborative project involving the QEII National Trust, Horizons, and the adjoining landowner. The project focuses on the restoration of more than 200 hectares of coastal treeland, flaxland, duneland and cliffs. Work included the control of pest plants species (marram and pampas), propagation of vegetation, specifically *Pimelea prostrata*, securing habitat for a rare native moth, *Notoreas perornata*, found only at Cape Turnagain, and control of goats and other pest animals. This project also helps to preserve and enhance the cultural and historical significance of this landscape, while educating the local and wider community. Horizons' contribution to this project was fully delivered this year.

GENESIS MOAWHANGO RIVER RESTORATION

- 4.3.20 Genesis has paid its \$5,000 annual contribution to willow removal on the Moawhango River, managed by our River Management Team. Blockages in the river channel caused by willows had resulted in trapped sediment, effectively causing a dead section of river. Removal of the willows has allowed sediment flushing to occur and the waterway has cleaned up considerably. Local residents report seeing fish now, whereas they had been absent before. Genesis take water

from the catchment for hydro-electric purposes and contribute to this project as one of their community initiatives.

COMMUNITY GRANTS

- 4.3.21 Despite delays due to lockdown, all nine of the community groups were able to get most or all of their project completed. The recipients that completed their projects were: Bulls River User Group, Castlecliff Coast Care and Progress Castlecliff Inc., Dannevirke High School, Hunterville Consolidated School, Nga Tawa Diocesan School, Ohau School, Puddleducks Montessori Preschool, Taihape Area School, and Westmere Lake Volunteers.

5 TŌTARA RESERVE REGIONAL PARK MANAGEMENT

5.1 Programme Overview

- 5.1.1 Tōtara Reserve Regional Park is focused on providing visitors with enjoyable biodiversity and recreational experiences. The work includes plant and animal pest control, flood protection, walking tracks and campground management and maintenance. Tōtara Reserve is one of the last and best remaining examples of lowland forest ecosystems in the Pohangina Valley and is also valued as an important site under the Biodiversity Priority Sites Programme

5.2 Activity Update

REMOVAL OF POPLARS

- 5.2.1 Council received an item on this in July and resolved to remove all the poplars bordering the stopbank at the Kererū Campground, which could delay the opening of the Kererū Campground. The procurement process for this is underway and will be reported back to Council for consideration.

ENHANCED PEST CONTROL

- 5.2.2 Further funding through the Annual Plan was approved to substantially upgrade animal pest control programme for the entire reserve. The pest control operations will be targeting rats and mustelids to improve ecological biodiversity and visitor experience in the reserve, which contains two campgrounds. A plan has been developed to be implemented this spring by the Regional Response Team. The pest targets are to reduce possum abundance to <5% **residual trap catch (RTC)**, and rat abundance to < 10% to enhance the biodiversity and amenity values present.

5.2.3 A stocktake on the progress made by the weed control programme is planned for 2021-22. This work will review progress to date and provide direction to ensure we continue to build on the results achieved so far.

CAPITAL PROJECTS

5.2.4 Planning has progressed for the approved CAPEX spending in the 2020-21 financial year. Priorities for the CAPEX projects include (in no particular order): a platform with safety rails around the septic system inspection point, an upgrade of the Kahikatea campground ablution block, sealing of the entranceways to both campgrounds and the caretaker's house, a website booking and payment system for the campgrounds, electrical upgrades at the powered camping sites, establishing the pest control programme (traps and bait stations), and an emergency phone at the Kereru campground. There is a CAPEX allocation of \$157,930 for the 2020-21 year and work is underway to prioritise projects and undertake procurement and implementation.

TŌTARA RESERVE ADVISORY GROUP

5.2.5 The development of Terms of Reference for the group and a strategy for Tōtara Reserve are tasks to be undertaken once the priority work of poplar removal and remediation of the site are completed.

Aaron Madden
ENVIRONMENTAL COORDINATOR – BIODIVERSITY

Lizzie Daly
SENIOR SCIENTIST - ECOLOGY

Rod Smillie
BIODIVERSITY, BIOSECURITY & PARTNERSHIPS MANAGER

Jon Roygard
GROUP MANAGER NATURAL RESOURCES AND PARTNERSHIPS