

I hereby give notice that an ordinary meeting of the Integrated Catchment Committee will be held on:

Date: Wednesday, 10 May 2023

Time: 9.30am

Venue: Tararua Room

**Horizons Regional Council** 

11-15 Victoria Avenue, Palmerston North

# INTEGRATED CATCHMENT COMMITTEE AGENDA

### **MEMBERSHIP**

ChairCr AR TaylorDeputy ChairCr EM ClarkeCouncillorsCr AL Benbow

Cr DB Cotton
Cr JT Edmonds
Cr SD Ferguson
Cr EB Gordon
Cr FJT Gordon
Cr RJ Keedwell
Cr GM McKellar
Cr JM Naylor
Cr NM Riley

Cr WK Te Awe Awe

Cr T Teira

Michael McCartney Chief Executive

Contact Telephone: 0508 800 800 Email: help@horizons.govt.nz Postal Address: Private Bag 11025, Palmerston North 4442

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# for further information regarding this agenda, please contact: Rosa De Souza, 06 9522 800

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|--------------------|---|---------------------------------------|-------------------------------|---|
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| REGIONAL<br>HOUSES | Palmerston North<br>11-15 Victoria Avenue                                   | <b>Whanganui</b><br>181 Guyton Street |                               |   |
| DEPOTS             | <b>Levin</b><br>120-122 Hokio Beach Rd                                      | <b>Taihape</b><br>243 Wairanu Rd      |                               |   |
| POSTAL<br>ADDRESS  | Horizons Regional Council, Priva  | ate Bag 11025, Manawa                 | tu Mail Centre, Palmers       | ston North 4442                           |



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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.

**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 first meeting of the twelfth triennium of the Integrated Catchment Committee held at 9.30am on Wednesday 15 February 2023, in the Tararua Room, Horizons Regional Council, 11-15 Victoria Avenue, Palmerston North.

PRESENT Crs AR Taylor (Chair), AL Benbow (via Zoom from 9.45am), EM Clarke,

DB Cotton, JT Edmonds, SD Ferguson, EB Gordon, FJT Gordon (via Zoom), RJ Keedwell (till 11.20am), GM McKellar, JM Naylor, NM Riley,

WK Te Awe Awe, and T Teira.

IN ATTENDANCE Chief Executive Mr M McCartney

Committee Secretary Mrs JA Kennedy

**ALSO PRESENT** At various times during the meeting:

Dr J Roygard (Group Manager Catchment Operations), Dr N Peet (Group Manager Strategy, Regulation & Science), Mr C Grant (Group Manager Corporate & Governance), Mr L Brown (Manager Freshwater & Partnerships), Mr C Davey (Biodiversity, Biosecurity & Partnerships Manager), Mr G Cooper (Manager Land & Partnerships), Ms D van Zyl (Project Engineer), Mrs C Hesselin (Media & Communications Manager), Mr C Rudd, Ms V Bold (members of the

public).

Via Zoom:

Mayor B Wanden, Deputy Mayor Cr D Allan, (Horowhenua District Council), Mr J Girling (Te Awahou Foxton Community Board

Member).

The Chair welcomed everyone to the meeting and invited Cr Edmonds to say a karakia.

### **APOLOGIES**

ICC 23-1 Moved Clarke/Keedwell

That the Committee receives an apology from Cr Benbow for lateness.

**CARRIED** 

Later in the meeting Cr Keedwell gave an apology for early departure from the meeting to attend other Council business.

A minute silence was held in remembrance of Mr Rod Pearce (ex Horizons Regional Council Councillor).



### **PUBLIC FORUMS / DEPUTATIONS / PETITIONS**

The Chair invited Mayor Wanden (Horowhenua District Council) to speak to his deputation. Mayor Wanden was supported by Deputy Mayor Allan and Mr Girling (Te Awahou Foxton Community Board Member).

Mayor Bernie said although he did not fully support the proposal as outlined in Item 8 of the agenda, Report No. 23-06, he expressed Horowhenua District Council's ongoing commitment and support for the outcomes of the Te Awahou Foxton Flood Mitigation project. He said engagement with stakeholders, the community, and HDC was important to find outcomes that were both effective, efficient and economic.

Cr Benbow joined the meeting via zoom at 9.45am.

### SUPPLEMENTARY ITEMS

There were no supplementary items to be considered.

### **MEMBERS' CONFLICTS OF INTEREST**

There were no conflicts of interest declared.

# **Update on Cyclone Gabrielle Event:**

Horizons Regional Council Emergency Management staff gave an update on the flood event and commented on the focus going forward. Imagery giving an overview of some of the damage across the region was shown.

# RIVER AND DRAINAGE ACTIVITY REPORT

Report No 23-04

This item reported on progress with river and drainage activities and planning for the 2022-23 Financial Year, during the August to December 2022 period, and provided some commentary on activities in January. Dr Roygard (Group Manager Catchment Operations) introduced the item and Ms van Zyl (Project Engineer) reported on the progress, timings, and delays associated with the delivery of some projects due to weather conditions.

# ICC 23-2 Moved

Riley/McKellar

That the Committee recommends that Council:

a. receives the information contained in Report No. 23-04.

**CARRIED** 

The meeting adjourned at 10.55am.

The meeting reconvened at 11.10am.

# TE AWAHOU FOXTON FLOOD MITIGATION

Report No 23-06

This item updated Council on the Te Awahou Foxton Flood Mitigation Project and sought Council's direction. Dr Roygard (Group Manager Group Manager Catchment Operations) introduced the item and acknowledged the comments made through a deputation earlier in the meeting by Mayor Wanden (Horowhenua District Council (HDC)) and Mr Girling (Te Awahou



Foxton Community Board Member). Dr Roygard then highlighted the history of flooding in Foxton Township and the scope of works taken to address it. He commented on the increased cost estimates, the challenges of meeting the contractual timeframe for central government co-funding, and noted a further application had been submitted.

Cr Keedwell left the meeting at 11.20am (to attend other Council business).

Members discussed the information in the report and considered the recommendations. Following discussion, additional wording was suggested to recommendation b.i. In the event that the recommendation was lost, Members considered whether the item could be deferred to the March Council meeting to enable time to engage fully with HDC.

The Chair put the recommendations with an amended b.i. and an additional recommendation vii.

### ICC 23-3 Moved

# Clarke/Ferguson

That the Committee recommends that Council:

B Gordon/McKellar

a. receives the information contained in Report No. 23-06 and Annex.

### **CARRIED**

### Moved

# Clarke/Ferguson

- b. directs the Chief Executive to:
  - i. proceed with option 2 the resilience work package including additional technical design work for the Foxton Climate Resilience project and continuing further design and construction for the Cook Street Wetland, in partnership with Horowhenua District Council;
  - ii. approach Kānoa (the Government Regional Economic Development & Investment Unit) to reallocate the Central Government co-funded work to the other Climate Resilience projects;
  - iii. complete any repayments required as a result of this decision to Central Government:
  - iv. advise Council on the outcome of the application to Central Government for further funding for this project;
  - v. present information on options for enhanced flood protection and stormwater upgrades to Council as part of the upcoming Long-Term Plan process;
  - vi. communicate the decisions of this item to project partners and the Foxton community;

vii. report back on budget implications of this decision.

Abstain: Cr F Gordon

**CARRIED** 



### LAND MANAGEMENT PROGRESS REPORT

Report No 23-05

This report covered work by the Catchment Operations – Land Management Activity, which included the Sustainable Land Management Initiative (SLUI), Regional Land and Coast, and Nursery activities. It also reported on Horizons' Annual Plan (AP) 2022-23 targets for those activity areas and the contract targets for the Hill Country Erosion Fund (HCEF) contract with Central Government via Te Uru Rakau (TUR), which co-funds the SLUI programme. The item also updated Whanganui Catchment Strategy (WCS) work that was co-funded by the Whanganui River Enhancement Trust (WRET). The item provided updates on activity during the period 1 July to 31 December 2022. Mr Cooper (Manager Land & Partnerships) gave an update on the SLUI works target, and commented on the decision required by Council regarding SLUI allocation levels and budgets. Following discussion on the options presented in the recommendations, recommendation b.i. was moved and seconded. The Chair put the recommendations separately.

### ICC 23-4 Moved

# Naylor/Cotton

That the Committee recommends that Council:

a. receives the information contained in Report No. 23-05.

### **CARRIED**

### Moved

# Ferguson/Clarke

That the Committee recommends that Council:

- notes the additional allocation of grant funding in the land management programme in the 2022-23 financial year exceeds the available annual budget, including current Sustainable Land Use Initiative reserves; and
  - Directs the Chief Executive to reduce the allocation of Sustainable Land Use Initiative grant funding to be within budget.

### LOST

As recommendation b.i. was Lost, a foreshadowed recommendation for b.ii., with amended wording, was put by the Chair.

### ICC 23-5 Moved

### B Gordon/Cotton

That the Committee recommends that Council:

- b. notes the additional allocation of grant funding in the land management programme in the 2022-23 financial year exceeds the available annual budget, including current Sustainable Land Use Initiative reserves; and
  - ii. Approves the budget being allocated and used on the basis that any overspend will be funded through use of Sustainable Land Use Initiative reserves.

# **CARRIED**

The meeting adjourned at 12.38pm.

The meeting reconvened at 1.15pm.



# BIODIVERSITY, BIOSECURITY AND PARTNERSHIPS PROGRESS REPORT

Report No 23-07

This item updated Members on progress made in the Catchment Operations Group's Biodiversity, Biosecurity and Partnerships activity during the 2022-23 financial year and the period 1 July to 31 December 2022. Mr Davey (Biodiversity, Biosecurity & Partnerships Manager) introduced the item, responded to questions, and commented on animal pests and control methods. There was discussion around what action/progress was being made with the Manawatū Estuary Management Plan.

ICC 23-6 Moved Te Awe Awe/Teira

That the Committee recommends that Council:

a. receives the information contained in Report No. 23-07.

**CARRIED** 

# FRESHWATER & PARTNERSHIPS PROGRESS REPORT

Report No 23-08

Mr Brown (Manager Freshwater & Partnerships) updated Members on progress made in the Catchment Operations Group's Freshwater and Partnerships activity during the 2022-23 financial year and the period 1 October to 31 December 2022.

ICC 23-7 Moved B Gordon/Clarke

That the Committee recommends that Council:

a. receives the information contained in Report No. 23-08 and Annex.

**CARRIED** 

| Confirmed                                       |       |
|---|-------|
|   |       |
| GROUP MANAGER<br>RIVER MANAGEMENT               | CHAIR |
| GROUP MANAGER<br>STRATEGY, REGULATION & SCIENCE |       |



| Report No.                              | 23-51 |  |  |  |
|---|-------|--|--|--|
| Information Only - No Decision Required |       |  |  |  |

# RIVER AND DRAINAGE ACTIVITY REPORT

# 1. PURPOSE

1.1. The purpose of this item is to report on progress with river and drainage activities and planning for the 2022-23 Financial Year, updated for the period January to March 2023.

# 2. EXECUTIVE SUMMARY

- 2.1. This item reports on the Catchment Operations Group's activity for River Management. Current and projected progress on the Annual Plan targets and other activities during the reporting period are presented in the sections below. The report is arranged in sections on Scheme Operational Management, Investigations and Design, and Projects (including Central Government co-funded and Feilding projects).
- 2.2. Response and recovery from weather events has been a primary activity of river and drainage activity during this financial year. The wet winter of 2022 was followed by events in September and December 2022. Cyclones Hale and Gabrielle impacted the region during the reporting period and the majority of river and drainage activity following these events has been related to response and recovery, including Horizons Regional Group recovery role. Damage assessments have been completed and Council has approved a \$9 million-plus package of damage repair works. Implementation of these works is getting underway and is likely to take two to three years to complete. Communication with Scheme Committees, Territorial Authorities, landowners, and national and local recovery programmes is ongoing.
- 2.3. The capital works programme for the current 2022-23 year is approximately \$25.893 million with the bulk of this planned work (\$22.995 million or 89%) for Central Government co-funded projects. Other projects include storm damage repairs, Capital renewals and scheme upgrade projects. Weather and other factors have delayed some of these projects as outlined and the programme is on-track to deliver about half of the planned activity. Programme delivery has been slowed through a combination of diversion of staff time to response and recovery work, work to secure permissions and Council decisions, as well as weather impacts on ability to complete construction.
- 2.4. The Capital programme for next financial year has been reset as part of the Annual Plan process. This includes adding an additional year for delivery to the Central Government cofunded projects and some changes to projects being delivered.
- 2.5. The River and Drainage Activity during the 2022-23 year has had a focus on rebuilding capacity and capability. Training and development are a key focus at present along with health and safety, and emergency management training.
- 2.6. Asset Management activity has been focussed on Horizons Annual Report and Annual Plan processes, and to inform work on insurance. Annual asset revaluations are being progressed. Asset Management inspections are well behind schedule due to staff vacancies and staff time being diverted to damage assessments post-Cyclone Gabrielle
- 2.7. Further detail on the River and Drainage Management Activity is provided in the report below. In summary, a considerable amount of activity particularly flood recovery work is underway. Work programmes have been interrupted by weather events and many Annual Plan targets are unlikely to be met this year.



### 3. RECOMMENDATION

That the Committee recommends that Council:

a. receives the information contained in Report No. 23-51.

### 4. FINANCIAL IMPACT

4.1. This item updates Council on a range of River Management and Drainage Activity, including updates on progress and financial allocations within projects. The report also identifies some changes to the scope and / or timing of some projects, including updating Council on use of reserves for some River and Drainage schemes.

### 5. COMMUNITY ENGAGEMENT

5.1. This is a public item and therefore Council may deem this sufficient to inform the public.

### 6. SIGNIFICANT BUSINESS RISK IMPACT

6.1. It is considered that there is no significant business risk of this item.

### 7. CLIMATE IMPACT STATEMENT

7.1. Horizons' River and Drainage Management Activity includes a range of construction activity and some environmental enhancement work, including tree planting. The activity has a focus on maintaining and increasing the resilience of the community to the impacts of climate change; however, delivery of that resilience does involve activities that are considered to have a climate change impact e.g. the use of fossil fuels.

### 8. CYCLONE GABRIELLE RECOVERY

- 8.1. The response to, and recovery from Cyclone Gabrielle and previous events has dominated the River and Drainage work programmes during the reporting period. A detailed paper on Cyclone Gabrielle recovery was presented to an Extraordinary Council Meeting in April and Council have approved a significant works programme to repair damage and improve resilience with a value of over \$9M (million) which is likely to take two to three years to implement.
- 8.2. This work programme is additional to the normal operational activity and already approved capital works programme. As a result, the previously approved Capital works programme has been revised to spread it over a longer time period in order to improve our ability to deliver on the programme with existing capacity. Some operational changes to the delivery model are also being implemented to increase internal capacity.

### 8.3. The approvals included:

- Extending timeframes of the current Central Government co-funded projects with delivery now targeted for 30 June 2025 (Resolution c);
- Reallocation of approximately \$2.3M of funding from the Foxton Climate Resilience project with approximately \$1.8M going to the Lower Manawatū Climate Resilience project and \$0.5M to the Rangitīkei Climate Resilience project (Resolution e);
- Approval of the draw down of reserves to provide the local share of funding to match
  the reallocations of Central Government co-funding above (Resolution f). These were
  from the Lower Manawatū Scheme (approximately \$0.6M) and the Rangitīkei Climate
  Resilience project (approximately \$0.167M). NB the \$2.4M of works in the Lower
  Manawatū project is additional to the \$9M-plus of damage and resilience upgrades



identified post- Cyclone Gabrielle. This takes the total amount of work approved to \$12.307M. NB the \$0.167M of reserve drawdown from the Rangitīkei project was included in the total in resolution g.

- Approval to draw down Scheme Emergency Reserves from eight schemes totalling \$3.737M (resolution g);
- Approval of a loan of \$500,000 for the Pohangina-Oroua scheme;
- Approval to change the funding allocation to 60% landowner contribution. This is estimated to raise the landowner contribution to \$2.663M if all works proceed;
- Approval of use of \$1.706M of River and Drainage General Reserve funds for damage repairs to three schemes where reserves were insufficient to enable all of the identified works (resolution k)
- Approval of \$500,000 of River and Drainage General Reserve funds as a contingency across the eight schemes identified in the paper (resolution k).
- Approval of \$200,000 from River and Drainage General Reserves And \$100,000 per year in new rates from the Tararua District for debris and riparian management in the Tararua (resolution I).
- 8.4. A summary of the approvals for the individual schemes and activities is provided in Table 1 and a summary of the totals and proportions from the various sources of funding is provided in Table 2. The scheme emergency reserve drawdowns used all reserves in three schemes (Pohangina-Oroua, Tararua River Management and the Upper Manawatū-lower Mangahao schemes). A total of \$2.406M of River and Drainage reserve was allocated, being approximately 81% of the \$2.998M in this reserve prior to this allocation. As highlighted in the April item, the reductions in the available reserves reduces the schemes' financial resilience to further events.

Table 1: Summary of approvals and reserve drawdowns from the Cyclone Gabrielle Recovery item in April.

| Area     | Scheme                             | Damage/<br>Repair cost | Total<br>reserves* | Allocation of<br>Central<br>Government<br>co-funding/<br>loan | Proposed<br>reserve<br>drawdown | Reserve<br>balance<br>after<br>drawdown | Allocation<br>from River<br>and<br>Drainage<br>General<br>Reserve | Erosion<br>control<br>works<br>landowner<br>share at<br>60% | Total new rates | Total works<br>completed |
|----------|------------------------------------|------------------------|--------------------|---|---------------------------------|---|---|---|-----------------|--------------------------|
| Norther  | Pohangina-Oroua**                  | \$5,258,000            | \$631,489          | \$500,000   | \$631,489                       | \$0                                     | \$1,463,711   | \$2,662,800   |                 | \$5,258,000              |
| n        | Rangitīkei with Govt. co-funding   | \$845,000              | \$1,555,035        | \$500,000   | \$345,000                       | \$1,210,035                             | \$0   |   |                 | \$845,000                |
| Central/ | Lower Manawatū                     | \$1,964,000            | \$4,192,453        |   | \$1,964,000                     | \$2,228,453                             | \$0   |   |                 | \$1,964,000              |
| Souther  | Manawatū Drainage Scheme**         | \$45,000               | \$518,899          |   | \$45,000                        | \$473,899                               | \$0   |   |                 | \$45,000                 |
| n        | Te Kawau**                         | \$22,000               | \$307,932          |   | \$22,000                        | \$285,932                               | \$0   |   |                 | \$22,000                 |
|          | South East Ruahine                 | \$115,000              | \$737,604          |   | \$115,000                       | \$622,604                               | \$0   |   |                 | \$115,000                |
| Eastern  | Tararua (TRM)                      | \$98,000               | \$57,702           |   | \$57,702                        | \$0                                     | \$40,298  |   |                 | \$98,000                 |
|          | Upper Manawatū Lower Mangahao      | \$760,000              | \$562,331          |   | \$557,486                       | \$4,845                                 | \$202,514   |   |                 | \$760,000                |
|          | Sub total cyclone damage           | \$9,107,000            | \$8,563,445        | \$1,000,000   | \$3,737,677                     | \$4,825,768                             | \$1,706,523   | \$2,662,800   |                 | \$9,107,000              |
|          | Tararua debris management          | \$300,000              |                    |   |                                 |   | \$200,000   |   | \$100,000       | \$300,000                |
|          | Contingency                        | \$500,000              |                    |   |                                 |   | \$500,000   |   |                 | \$500,000                |
|          | Total cyclone damage               | \$9,907,000            | \$8,563,445        | \$1,000,000   | \$3,737,677                     | \$4,825,768                             | \$2,406,523   | \$2,662,800   | \$100,000       | \$9,907,000              |
|          | Lower Manawatū incl. Moutoa repair | \$2,400,000            | \$2,228,453        | \$1,800,000   | \$600,000                       | \$1,628,453                             |   |   |                 | \$2,400,000              |
|          | Total Including Moutoa repair      | \$12,307,000           | \$8,563,445        | \$2,800,000   | \$4,337,677                     | \$4,225,768                             | \$2,406,523   | \$2,662,800   | \$100,000       | \$12,307,000             |

<sup>\*</sup>Combination of Emergency and Renewal reserves and 20% general rate.
\*\* Adjusted for Scheme Reserve Drawdowns during 2022-23 financial year.

**Table 2:** Summary of funding approvals from the Cyclone Gabrielle Recovery item in April.

| Funding source                      | Amount       | Proportion |
|-------------------------------------|--------------|------------|
| Reallocation of Govt. co-funding    | \$2,300,000  | 18.7%      |
| Scheme Emergency Reserves           | \$4,337,677  | 35.2%      |
| River & Drainage General Reserve    | \$2,406,523  | 19.6%      |
| Loan – Pohangina-Oroua              | \$500,000    | 4.1%       |
| Landowner contribution              | \$2,662,800  | 21.6%      |
| New Rate Funding – Tararua District | \$100,000    | 0.8%       |
| Total                               | \$12,307,000 | 100.0%     |



### 9. SCHEME OPERATIONAL ACTIVITY

- 9.1. As noted above, the response to, and recovery from Cyclone Gabrielle and previous events dominated the River and Drainage work programmes during the reporting period, while operational maintenance and planting activity have continued. Updates on this activity for the various areas of the region are provided in the sections below. All six Annual Plan targets for scheme management are unlikely to be met this year (Table 3).
- 9.2. Staff recruitment and training have been a focus during the reporting period with training programmes prioritising Health & Safety and emergency management-type training. Immediate priorities include recruiting more River Management Duty Officers, as well as additional Makino Gate and Moutoa Gate operators. Some staff are also undertaking emergency management training at the foundational or intermediate level. During the next reporting period we aim to create space in the work programme to establish a more formal flood preparedness training programme.

**Table 3:** Progress on Annual Plan targets for the scheme management component of the River and Drainage Management Activity for the 2022-23 year.

| Performance measures   | Measure                                    | Target  | Progress  |
|--|--|---|---|
| Flood and erosion<br>protection assets<br>and systems are<br>maintained        | Completion of maintenance programme.       | Schemes to be maintained to full-service potential in accordance with the Asset Management Plan or the Operations and Maintenance Manual.               | Operational work is underway and is being impacted by storm damage. Unlikely to achieve.  |
|  | System performance design standard.        | Schemes meet level of service requirements as documented in the Asset Management Plan.  | To be monitored during the year. Unlikely to achieve.   |
|  | Completion of asset inspection programme.  | Scheme asset inspections are completed in accordance with requirements specified in the Asset Management Plan or the Operations and Maintenance Manual. | New team established in the group to focus on asset and environmental management with additional capacity. Unlikely to achieve. |
| Performance measures   | Measure                                    | Target  | Progress  |
| Flood and erosion protection assets and systems are repaired.                  | Response to flood events or damage.        | Following a flood event, damage is identified and programmed for repair. High priority works are completed within six months.                           | Damage from events being assessed and some repairs underway (see text for details). Unlikely to achieve.                        |
| Assets are renewed at end of useful life or to address a service level change. | Completion of renewals programme.          | As per Asset Management Plan Renewal programme.   | Some renewal programmes<br>underway and others still in<br>the planning phase.<br>Unlikely to achieve                           |
| New assets are constructed.  | Completion of new capital works programme. | Complete all Capital works as outlined in the Asset Management Plan and budgeted for in the Annual Plan.  | Several delays across the programme due to weather events and other factors. Unlikely to achieve.                               |

# **Northern Schemes Update**

- 9.3. The Northern area, which includes the Rangitīkei and Whanganui catchments, has 15 schemes including 11 river schemes, one global scheme and two drainage schemes. The usual total operational budget for all scheme activities, excluding Capital works, this year is \$2.4M.
- 9.4. Work undertaking flood repairs on the Upper Whanganui Scheme is progressing. Staff have been engaging with local iwi about river management practices to ensure appropriate permissions are in place and work has been approved to commence.
- 9.5. Following a series of high-flow events during last winter and early summer, which required an application to Council to draw down on emergency reserves to undertake flood repairs,



the Pohangina-Oroua Scheme was further damaged in February 2023 during Cyclone Gabrielle. This was a significant storm for the scheme with flows indicating an 80 to 100-year event for the Oroua and a 40-year event for the Pohangina. These high flows resulted in substantial damage throughout the scheme with initial cost estimates exceeding \$5M. A series of meetings involving community/scheme members followed to hear from landowners and to update on the process Horizons was working through to identify and catalogue damage, as well as hear their concerns. Following these meetings, and the damage inspection programme carried out by staff, a report was tabled to Council. Council approved the work programme and a further scheme meeting has been held. This confirmed the scheme's commitment to take out a further loan as approved by Council and discussed priorities, building back with more resilience, and next steps for the works to get underway.

9.6. The Rangitīkei Scheme suffered a similar pattern of damage but not to the same value. Estimated repair costs are \$0.85M with channel management comprising the majority of the work required. Council approved funding for this work at their Extraordinary Meeting on 5 April 2023 and works are underway on some repairs. A scheme meeting is planned for early May.

### **Eastern Area Scheme Update**

- 9.7. The Eastern area includes the Manawatū and Puketoi ki Tai catchments. There are five schemes in the area, four of which serve sections of the Manawatū Catchment and one global scheme that covers both the Manawatū and Puketoi ki Tai catchments. The total budget for all scheme activities for the year is \$2.2M.
- 9.8. Several Eastern Area river schemes were affected by Cyclone Gabrielle with the worst affected being the South-East Ruahine, Upper Manawatū Lower Mangahao and the northern and eastern areas of the district-wide Tararua River Management Scheme. Council has approved the works programmes for repairs and an additional amount of funding for debris and riparian management in the Tararua District.
- 9.9. The South-East Ruahine Scheme had largely completed its works programme prior to Cyclone Gabrielle with repair work to two grade control weirs completed after damage had occurred due to Cyclone Hale. Cyclone Gabrielle resulted in significant gravel movement in several tributaries, resulting in lateral scouring of riverbanks and a reduction in channel capacity. Contractors have been focussing on removing debris from these channels, and we are working with them to extract gravel from targeted areas to reduce pressure on areas of identified erosion.
- 9.10. The Mangatainoka Scheme was largely unaffected by Cyclone Gabrielle. With staff and contractor resources being prioritised to reactive work, and time constraints for work programmes due to trout spawning from May, it is unlikely that the Capital works programme will be completed this year. Outstanding high priority sites will be deferred to the 2023-24 works programme.
- 9.11. The Upper Manawatū Lower Mangahao Scheme suffered significant damage as a result of Cyclone Gabrielle with several erosion protection assets either damaged or destroyed. Assets installed this year have performed remarkably well although they do require some repairs. Tied tree works in the lower reaches of the scheme were due to be completed by mid-April 2023.
- 9.12. The Tararua River Management Scheme maintenance programme has been delayed until February 2024 due to resource availability. Large areas of the scheme were also affected by Cyclone Gabrielle, specifically the northern reaches of the Upper Manawatū River, plus rivers and streams in the Herbertville / Wimbledon area. As a result of this, the focus has been on channel clearance to prevent debris damaging bridges and causing further flooding in future rain events. Due to the above work and trout spawning commencing in May, a majority of the programme will need to be deferred until 2023-24.



# **Central Area Scheme Update**

- 9.13. The Central area includes the Lower Manawatū catchment, primarily focusing on the major rivers and streams downstream of the Pohangina confluence with the Manawatū and out to Foxton Beach. There are four schemes in this catchment, with a combined rate take of approximately \$6.7M and a works budget of \$1.9M (excluding Climate Resilience projects, which are reported on elsewhere).
- 9.14. Central schemes continue to be impacted by the weather patterns that we have seen over this financial period. The effects of Cyclone Gabrielle have also been felt within the Central area, particularly in the Oroua River with significant damage to erosion protection works and deposition of debris and silt within the channel. The Manawatū River was also impacted, exacerbating some of the slumping that had already occurred and depositing large amounts of silt along river channels.
- 9.15. The schemes' annual maintenance programmes are progressing well with autumn works programmes completed in the Kahuterawa Stream and underway in both the Makino and Mangaone. Mowing of scheme stopbanks has also progressed well and the unseasonable weather this year caused grass growth to continue through summer and require increased frequency of some mowing. The time taken to mow other banks has also increased because of the height of growth, meaning that expenditure on repairs and maintenance to date is approximately 82% of the initial full-year budget. Additional funding will be required to complete the year's maintenance programmes as well as to commence flood damage repairs.
- 9.16. Scheme capital expenditure (excluding Climate Resilience projects) to date is approximately 39% of the full programme, however some projects are just getting underway. The team are still aiming to complete all planned capital projects in the Central area this year.
- 9.17. Extreme weather events during the January to March reporting period have required ongoing staff responses and flood damage inspections in the Southern and Central areas. Our contractors have also been kept busy repairing damage and commencing works on annual preventive maintenance programmes. Other significant activities undertaken during this period include:
  - Stoney Creek channel maintenance;
  - Debris clearance from the Fitzroy Groynes following Cyclone Gabrielle;
  - Mechanical drain cleaning at Blackmore's, Whakarongo and other smaller drains to remove silt deposited in the recent flood event;
  - Culverts and floodgate replacement on Goodman Badger Drain;
  - Mowing through Palmerston North; and
  - Clearing and stockpiling of debris at various sites.
- 9.18. Recent issues with components at both the Makino and Moutoa floodgates have led to further investigations being undertaken at both sites, with additional issues and risks being brought to our attention. Components to repair the damaged gate at Makino have now arrived in New Zealand and we are working with a local manufacturer to install them. Further works to address some rust issues with the steel framing, and a review of the operating mechanism at this gate, are being investigated.
- 9.19. Work is underway at the Moutoa Gates to upgrade all electrical components as well as lighting. However, as a result of the recent failure of one of the nine gates, further investigations of the motors and gearboxes has found that these components are no longer available. It has also been identified that the frames and anchor bolts that hold these in place have deteriorated and need to be replaced. Staff are working with Resonant Consulting to review the frames and anchor bolts, as well as the concrete supports. At the



same time, options and quotes are being sought from two local manufacturers for the replacement of the motors and gear boxes. Council has approved a budget for the upgrades to the Moutoa Gates as part of the recent Cyclone Gabrielle paper, and this project is now part of the lower Manawatū Climate Resilience project.

### **Southern Area Scheme Update**

- 9.20. The Southern area includes the Manawatū and Horowhenua catchments, primarily focusing on the drainage schemes in the lower Manawatū floodplains south of Feilding through to Levin, and from the Tararua Ranges out to the Coast, as well as the network of waterways in and out of Lake Horowhenua, and waterways south of Levin including the Ōhau, Waikawa and Manakau. There are 10 schemes in this area with a combined rates take of approximately \$3.6M and a works budget of \$2.8M (excluding Climate Resilience projects).
- 9.21. Southern schemes continue to be impacted by the very wet winter and spring, with higher than usual groundwater tables and unseasonable weather conditions exacerbating weed growth and demands for maintenance from concerned ratepayers.
- 9.22. While the majority of the Southern Scheme was not directly impacted by recent weather events, overflows from the Oroua River into the Manawatū Drainage Scheme did result in additional damage to infrastructure. The operation of the Moutoa Gates necessitated the removal of significant debris build-up there.
- 9.23. A steady increase in demand for drain maintenance and repairs to infrastructure has been challenging for newer team members, putting increased pressure on senior staff to help support and develop them. Increased energy costs, maintenance costs and damage repairs for the first half of the reporting period, along with ongoing demand for work, has meant that expenditure on repairs and maintenance to date is approximately 76% of the revised full-year budget. This continues to be ahead of the normal spend for this time of the year and puts additional pressure on staff to manage expenditure within the revised budgets.
- 9.24. Scheme capital expenditure (excluding Climate Resilience projects) is tracking well with a number of renewals and Capital projects being completed. Earthworks for the current stage of work on Koputaroa stopbanks have been completed, with the only remaining work being relocation of power poles and fencing along the new stopbank alignment.
- 9.25. Capital expenditure on the Manawatū Drainage Scheme is also on track, with upgrade work on the Aorangi stopbanks being completed and work on the Burke's Drain stopbank programmed for completion in April.
- 9.26. Capex renewals in Te Kawau and Makerua Drainage Schemes continue to push revised budgets. Recent problems detected with one of the Okuku pumps have resulted in the pump needing to be rebuilt, and a number of floodgate issues were identified along Te Kawau Main Drain. Work required on both schemes is likely to require additional renewals funding.
- 9.27. Extreme weather events during the reporting period kept staff busy responding to the events and undertaking flood damage inspections in the Southern Area. Contractors have also been busy with mechanical and herbicide maintenance of drains as well as flood damage repairs. Other significant activities undertaken during this period include:
  - Bennett's No.1 Drain refurbishment upstream of State Highway 3;
  - Pleon Drain Culvert replacement;
  - Hansen Line Drain reshaping;
  - Kere Kere Road outlet armouring;
  - Montgomery's Drain retaining walls;
  - Purcell Street outlet repairs;
  - Ōhau River Senior Bend concrete groynes;



- Kuku Stream retaining wall;
- Kaimatarau Road drainage improvements; and
- Duck Creek Pump Station outlet repairs.
- 9.28. Recent surveys of the banks along the Aratangata Drain had identified sections of bank lower than the current spillways, which were allowing water to spill into paddocks before the spillways operate. Work is underway to raise these banks to ensure that the system operates as per design. Work is also underway to install slide gates on the upstream side of the Aratangata floodgates to provide additional protection to this area following a series of leakage issues with the floodgates.
- 9.29. Pump station maintenance and monitoring continued during the reporting period and staff are initiating work with contractors to review communication from pump stations, with a particular focus on ensuring information is available during emergency management events. A further project, which is not yet resourced, is to review the operation of pump stations should power be lost in an emergency management event.

### 10. INVESTIGATION AND DESIGN

- 10.1. The Investigations and Design Team's priority during the reporting period included assisting with the recovery works after Cyclone Gabrielle, assisting with the delivery of Horizons Capital works programme, and providing technical advice to internal teams, Territorial Authorities and external bodies.
- 10.2. The team assisted with onsite assessments for damage repairs with a particular focus on the Pohangina/Oroua and Rangitīkei, and initiated work on modelling of the flooding that occurred at Te Arakura road (near Feilding) and Saddle Road (near Ashhurst). There are several components to this work, including improving flood warnings for these areas, understanding how the event occurred and impacted locally, and providing recommendations for future resilience. This work will take time and is being advanced within the range of other priorities for the team. Alongside this design work, physical works including drain clearance are being progressed. Channel maintenance near the Saddle Road is also being investigated.
- 10.3. The course of Cyclone Gabrielle provided a range of lessons on flood modelling to inform emergency management response and areas that can be improved. As time, capacity and budgets allow, the team will work on scoping some potential upgrade work.
- 10.4. During the reporting period, the Investigations and Design Team assisted with a range of Horizons Capital works projects including:
  - Investigation work for Feilding flood and stormwater management (see below);
  - External engagement of design work for the Okuku and Rangiotu gates; and
  - Informing design work for the Te Pūwaha project in Whanganui.
- 10.5. During the reporting period, technical support for Territorial Authorities and developers included:
  - Reviewing the Rangitīkei District Council (RDC)'s Draft Spatial Plan considering flood hazard and stormwater management perspectives, and providing flood hazard information for new residential zones in Marton, Bulls and Hunterville;
  - Reviewing a Private Plan Change for Rongotea. The Hearings Committee requested a
    joint statement from stormwater experts representing Horizons, GHD (the design
    consultant) and Manawatū District Council (MDC);
  - Advising on the resource consent applications for the Manawatū River Shared Pathway proposed by Palmerston North City Council (PNCC); and



- Reviewing a developer's plan, and advising (along with PNCC) that this could potentially increase flood risk to Palmerston North City, resulting in changes to the proposal.
- 10.6. Technical advice provided to Horizons teams included:
  - Working closely with Horizons Freshwater Team to advise on fish passage design and implications from removal of weirs; and
  - Contributing to Horizons Hazard Mapping Group to identify 200-year annual return interval flood risk and finalising the Makirikiri Flood Modelling report.
- 10.7. All four investigations and design Annual Plan targets for the year are unlikely to be met (Table 4). In summary:
  - Horizons put a hold on scheme reviews several years ago but a review is underway
    this year at a broader level, across all River and Drainage Activity rather than the
    Annual Plan target of two individual schemes;
  - The target of applying a good practice guideline to a scheme is also unlikely to be met as staff prioritise their time to supporting the delivery of the Capital programmes and monitoring/ responding to the rainfall events and subsequent work to repair damage;
  - Prior to Cyclone Gabrielle, work was underway on one operational manual towards a target of eight but has subsequently been put on hold. This task requires experienced staff members' time, which is being prioritised to the rainfall event response and Capital programme delivery; and
  - The target for Environmental Grants will be challenging to meet due to low interest in uptake of the grants, and that with three grants allocated for a target of 10, a total of 41% of the budget has been allocated.

**Table 4:** Progress on Annual Plan Targets for the Investigation and Design component of the River Management Activity for the 2022-23 year.

| Performance measures   | Target | Progress   |
|--|--------|--|
| In accordance with the programme identified in the Infrastructure Strategy, carry out and report to Council on reviews of schemes including assessing whether the current management approach is sustainable, how best to meet the needs of the community now and in future and whether the associated funding model is both efficient and equitable (reports to Council). | 2      | A review of Horizons River and Drainage activity across all schemes, projects and investigation and design is underway. No individual scheme reviews are planned this year.  This target will not be met at year-end.    |
| In accordance with the programme identified in Table 1 of the Long-Term Plan, River Management Activity Section, assess the performance of flood protection assets in line with the Code of Practice developed by the River Managers Forum (schemes assessed)  | 1      | The application of this good practice guideline to an individual scheme is not being prioritised this year, while the larger River and Drainage Management review is underway.  This target will not be met at year-end. |
| In accordance with the programme identified in Table 2, produce operations, maintenance and surveillance manuals that capture scheme history, operating context and the inspection and maintenance activities required to deliver the levels of service to the relevant communities (Operations and Maintenance manuals produced)  | 8      | Work had been initiated on the Koputaroa Drainage Scheme Operations and Maintenance Manuals with an aim to deliver this year.  This target will not be met at year-end.  |
| Apply Environmental Grant funding assistance to applicants where criteria is satisfied (grants).   | 10     | Three applications have been approved allocating 41% of the total grant funding available. This target will not be met at year-end.  |



### 11. PROJECTS

- 11.1. The project component of the River and Drainage Activity includes work on the five Central Government co-funded projects and ratepayer-funded projects including Te Arakura and the Feilding flood protection and stormwater management work that includes the Reid Line spillway. Updates on these projects are provided in the sections below.
- 11.2. During the reporting period, much of the work experienced delays either through direct weather impacts such as rivers being too high or damaging work sites, or through indirect weather event impacts caused by the projects team being nearly fully focused on event response and recovery. Other factors around obtaining permissions and Council decisions on some aspects of the works have also contributed to less work being completed than planned. For example, in the Te Pūwaha (Whanganui) project there have been delays with obtaining resource consent permissions for Tanae Groyne works and an additional step required to get Council decisions on the Tregenna Street flood protection.
- 11.3. Overall, the programme is on track to deliver about half of the planned \$25.893 million work programme for the year. This is a similar level of overall work to that completed last year.
- 11.4. As part of the <u>Cyclone Gabrielle Recovery</u> item which approved additional flood repair work, Council approved spreading the remaining delivery of the Central Government cofunded programmes over two years. Work has been undertaken to prepare a works programme over the additional year of delivery. The revised programme will be considered by Council via the Annual Plan. As drafted for Council, this programme is at a similar level to the delivery over the past few years and has considered staff capacity and readiness of the projects for delivery e.g. design and permissions.
- 11.5. The extensions of these projects are subject to approval by Kānoa and discussions are underway. These discussions will also include Councils decision to reallocate funding from the Te Awahou Foxton Climate Resilience project to other Climate Resilience projects where repairs are required following the recent weather events and at Moutoa floodgates where issues have been identified.

# Te Awahou Foxton Flood Mitigation Project

- 11.6. In February 2023 Council decided to proceed with the resilience work package and the Cook Street wetland, as outlined in report 23-06 <u>Te Awahou Foxton Flood Mitigation</u> while continuing the technical investigation and design for the broader solution for mitigation of Foxton's flooding.
- 11.7. The resilience package includes installation of upstream attenuation structures and a sheet piling wall on the true right bank of Kings Canal.
- 11.8. The installation of the upstream attenuation structures will require consent because at least one landowner will be adversely affected as attenuation will occur on his property. Consultation with the relevant landowners has started and is ongoing.
- 11.9. Further investigation into the possible water quality benefits of the Cook Street wetland is underway.
- 11.10. Progress on this project during the reporting period was limited with the Project Manager leading the assessment and quantifying damage resulting from Cyclone Gabrielle.
- 11.11. The work programme has been reviewed following Council's decision to extend the Central Government co-funded project. Works on the Purcell Street Drain are being prioritised over the Union Street culvert upgrade, to increase safety and to assist with pumping of floodwater from the Purcell Drain area into the river loop during storm events.



# Palmerston North and Lower Manawatū Scheme Climate Resilience Projects

- 11.12. The Palmerston North Stopbanks (PNSB) and Lower Manawatū Scheme (LMS) Climate Resilience projects are two of the four Central Government co-funded Climate Resilience projects that Horizons are delivering. These projects are focused on construction of improvements to the flood protection through the city of Palmerston North and in the Lower Manawatū Scheme. A summary of the various sub-projects is provided in Table 5 and there are further updates below.
- 11.13. Stage 1 for the Tokomaru Stopbank upgrade resumed in early February following successful negotiations with iwi. This sub-project was largely unaffected by the recent flood events due to minimal rainfall in the catchment and appropriate preparations to secure the site by Horizons and the contractor. Stage 2 for the Tokomaru Stopbank upgrade has been pushed back until spring 2023. Meanwhile, the existing stopbank design is under review to ensure that the constructed asset is of adequate design and will provide the appropriate level of protection.
- 11.14. The Te Matai Rock Lining sub-project was significantly affected by the repeated flooding events, with both time and budget implications. Attempts to accelerate the works programme have not had the intended effect, in part due to the limitation of available suitable equipment for these types of large construction projects. The team is investigating a proposal by the contractor to progress the contract works throughout the winter season and are assessing this.
- 11.15. The Albert Street Rock Armoring project has experienced ongoing weather-related delays and also due to the discovery of contaminated material. Construction has been delayed into April 2023 due to high river levels and this is likely to lead to a truncated construction timeline with rock placement being deferred into the next construction season.
- 11.16. Design work for the Tremaine Avenue Gabion Basket wall replacement sub-project has been completed for the area downstream of the bridge and design of stage 2 (upstream of the Tremaine Avenue bridge) is due to commence shortly. It is proposed that this project continue to be prepared for delivery during the next year (2023-24), with construction of both stages to occur in the following 2024-25 year.
- 11.17. As part of Council's decision in April to reallocate some of the Government co-funding from the Foxton project, the maintenance work at the Moutoa Floodgates was added to this work programme. This places two projects related to Moutoa Spillway within this work programme, one on the gates that are opened to allow water through the spillway and the other at the downstream end of the Moutoa Spillway. The reallocation of funds also provided for some additional costs associated with managing the Te Matai Road site during successive weather events at this active work site.



Table 5: Subprojects and status summary as at April 2023.

| Project | Sub-project                                       | Status  |
|---------|---|---|
| LMS     | Foxton Beach Rock Armouring                       | Complete  |
| PNSB    | Gas Works Drain                                   | Complete  |
| PNSB    | Bisley Street timber wall removal                 | Complete  |
| PNSB    | Kakatangiata stopbank                             | Complete  |
| LMS     | Te Matai Road rock armouring                      | Under Construction.   |
| PNSB    | Tremaine Avenue Gabion<br>Basket wall replacement | Design underway. Construction programmed for 2024-25.   |
| LMS     | Tokomaru stopbank                                 | Stage 1 nearing completion. Tenders closed for Stage 2. Construction now programmed to begin Spring 2023.   |
| PNSB    | Albert Street erosion                             | Design and consent received. Construction commencing April 2023 – delayed due to high river levels (weather).   |
| PNSB    | Belvedere Crescent                                | One property purchased. Negotiation ongoing for second property.  |
| LMS     | Moutoa Outlet Pumpstation and Gates               | Stopbank survey complete and results investigated – no works required on the stopbank. First quote received for electrical upgrades, awaiting second quote. |
| LMS     | Waterfall Creek Culvert and<br>Makerua Swamp      | Some investigations completed, project on hold to support higher priority works.  |
| LMS     | Rangiotu Gates replacement                        | Design underway.  |
| LMS     | Okuku Gates design                                | Design underway.  |
| LMS     | Lower Manawatū slumping assessment                | Scoping possible works.   |
| PNSB    | Mangaone resilience study                         | Scoping possible works.   |

# Rangitīkei Climate Resilience Project

- 11.18. The Rangitīkei Climate Resilience project is implementing a more resilient approach to river management for the river downstream of the Bulls Bridge, with one aim being to reduce future damage cost. The budget is \$5.2M, with 75% Central Government funding over four years. More information on this project and the proposed approach is available in the August Catchment Operations report.
- 11.19. The current exotic vegetation removal contract is 95% complete and is expected to be finished by the end of April, to the approved budget. Related aerial spraying of many mulched areas was completed in March.
- 11.20. Planting plans have been developed and plants ordered for the 2023-24 planting season. Negotiations with landowners are underway.
- 11.21. As noted in the Northern Area comments, and in the item presented at the 5 April 2023 Extraordinary Council Meeting, damage within the Rangitīkei River corridor has resulted from cyclones Hale and Gabrielle. These events have delayed some project work with the track upgrade sub-project at Scott's Ferry being deferred while urgent recovery work is prioritised.
- 11.22. As part of Council's decision in April to reallocate some of the Central Government cofunding from the Foxton project, some of the works identified as part of the assessment for cyclone recovery have been included in this project. It is currently anticipated that from this funding, four major sub-projects and several smaller sub-projects will receive funding to effect repairs and build resilience. Some of these works are underway. How fast some of these works will proceed depend on our ability to secure regulatory permissions.

### Te Pūwaha

11.23. Te Pūwaha refers to the gateway, or river mouth, and is also the name of the Whanganui Port Revitalisation project. Te Pūwaha is a partnership involving Whanganui iwi and five other groups invested in the project: Whanganui District Council (WDC), Horizons Regional Council (Horizons), Q-West Boat Builders, Whanganui District Employment



Training Trust and Central Government. Horizons' component of the project focuses on strengthening and upgrading old river training structures in the lower reach of the Whanganui River.

- 11.24. The River Training Structures part of the overall Te Pūwaha programme is funded through an agreement between Central Government, via the Ministry of Business, Innovation and Employment (MBIE) and Horizons dated 10 July 2020. This provides for a Central Government contribution of up to \$7.5M towards a \$16.4M project. A contribution of \$1.8M from WDC is included in the total budget of \$16.4M. The Horizons' ratepayer share is \$7.1M.
- 11.25. Council received an item on Te Pūwaha in March and made a range of decisions in relation to the project.
- 11.26. The North Mole works have continued and work has recommenced on the upgrade of two stormwater outlets with the majority funded by WDC. One of the two fishing platforms is nearing completion and the second platform was planned to start in late April/ May 2023. Design of the flood protection improvements at Tregenna Street is underway. A meeting was held on-site to give local residents and landowners an opportunity to discuss with local Councillors the decision to provide flood protection to a height of 4.1 metres, in accordance with the resolution from the 28 March 2023 Council meeting. Several Councillors attended an on-site "walk around" to view the proposed amenity upgrades at the North Mole.
- 11.27. The Tanae Groyne work remains on hold while consenting and procurement arrangements are being worked through.
- 11.28. Project budgets have been reallocated to reflect delivery over an additional year. NB this has required allocation of additional project management costs within the existing budget.

# **Feilding Special Project**

- 11.29. Horizons staff are working through a project jointly with **Manawatū District Council (MDC)** around stormwater management and flood protection for Feilding. The aim of this work is to consider the broader strategy for Horizons and MDC activity during the next 10 years to ensure a coordinated and prioritised approach to stormwater and flood management.
- 11.30. This work is progressing in four main parts (Figure 2):
  - 1. Reid Line Spillway design
  - 2. Urban reach constriction assessment
  - 3. Downstream of Feilding resilience options; and
  - 4. Stormwater reticulation and Makino Stream modelling
- 11.31. The Reid Line Spillway design process has been commissioned for delivery by 30 September. This design work will inform the next steps, including enabling updated project plans and budget projections to be developed. The urban reach constriction assessment work has included a survey of assets in the Makino that was completed during the reporting period. The constriction assessment and downstream resilience options work are on track for completion by the end of June.

# Te Arakura Road Stopbank Project

- 11.32. The project aims to complete the final stage of the Lower Manawatū Rural Upgrade, which is the Te Arakura Road project to connect already completed stop-banking on the left bank of the river, north of the Awahuri Bridge, with that south of the Feilding Golf Club.
- 11.33. Physical work on this project began in the summer of 2019-20; however, following protest action on one of the affected land parcels, work was suspended in January 2020. To progress this work, engagement with affected parties needs to be re-established effectively. Three hui have been held with local iwi / hapū groups with multiple issues raised that will need to be worked through before any further physical work project can



- resume. These meetings did not engage with all landowners in the area and it is clear that considerable further engagement is required for a plan to be agreed by all landowners.
- 11.34. Until this upgrade is resolved, there is a residual risk for a range of properties and flooding of some properties and marae occurred during the Cyclone Gabrielle event. This risk is complicated by completion of the other sections of this larger project which change the dynamics of where water will flow and who will be impacted in a larger event.
- 11.35. Horizons have met with the marae committee and provided a koha to assist with the post-Cyclone Gabrielle clean-up. Staff met with a range of impacted landowners after the event and communications around progressing this project have been positive with plans in place for additional engagement. Some of the funding for damage repairs approved in April relates to drainage upgrades near this location.

### 12. SIGNIFICANCE

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

Julia Jung
INVESTIGATION & DESIGN TEAM LEADER
Wayne Spencer
AREA ENGINEER NORTHERN
John Foxall
AREA ENGINEER CENTRAL & SOUTHERN
Dr Jon Roygard

**GROUP MANAGER CATCHMENT OPERATIONS** 

Shaun Edwards
MANAGER PROJECTS
Anthony Mason
AREA ENGINEER EASTERN
David Rei Miller
OPERATIONS MANAGER

### **ANNEXES**

There are no attachments to this report.



| Report No.               | 23-52 |
|--------------------------|-------|
| <b>Decision Required</b> |       |

### LAND MANAGEMENT PROGRESS REPORT

### 1. PURPOSE

1.1. This report covers work by the Catchment Operations – Land Management Activity, which includes the Sustainable Land Management Initiative (SLUI), Regional Land and Coast, and Nursery activities. It also reports on Horizons' Annual Plan (AP) 2022-23 targets for these activity areas and the contract targets for the Hill Country Erosion Fund (HCEF) contract with Central Government via Te Uru Rakau (TUR), which co-funds the SLUI programme. The item also updates Whanganui Catchment Strategy (WCS) work that is co-funded by the Whanganui River Enhancement Trust (WRET). The item provides updates on activity during the period 1 January to 28 March 2023.

### 2. EXECUTIVE SUMMARY

- 2.1. This report details progress for the first nine months of the financial year, from July 2022 to March 2023. There are five Annual Plan targets and six SLUI contract targets for the Land Management Activity in the 2022-23 financial year. The programme is on track to achieve all of these targets.
- 2.2. The 2022-23 year is the fourth year of a four-year SLUI contract with Central Government that targets completion of 13,665 ha of erosion control works to be completed over four years. At the end of the third year of the contract (June 30, 2022), this target had already been exceeded with 14,639 ha (107% of the target) completed. The annual works target for the SLUI contract is 3,735 ha, an increase from the previous year's target of 3,425 ha.
- 2.3. The SLUI and WCS grant programmes are both over-allocated this year with the over-allocation approach approved by Council in previous years, most recently approved in February. This approach provides for the reality that not all allocated work will be completed within the financial year. Completion rates have been 59% in 2020-21 and 73% in 2021-22, with both years exceeding targets. Consistent with previous years approvals, Council have approved any additional spend to be funded via SLUI reserves. These are reserves that were generated from less work than budgeted being completed in previous years. There are currently no SLUI reserves available, however may be some other savings in the programme. Any overall additional spend is likely to impact on availability of budget, next financial year making it difficult to confirm work programmes for the next financial year with landowners.
- 2.4. A delay in decisions on the next four years of Central Government funding via the HCEF has also created uncertainty around the scale and scope of next year's programme. We are now hearing that landowners are being told through various forums that there is no funding available next year. Without Governments decision on co-funding and with uncertainty around the implications of over allocation this year on budgets next year, staff are finding it difficult to confirm targets for the programme and work plans with landowners.
- 2.5. Cyclones Halle and Gabrielle have had a major impact on the region, with Halle triggering isolated erosion and high river levels while Gabrielle caused significant on-farm damage in the Tararua District, upper Pohangina and Oroua catchments. Landowners have been counting the cost on-farm with fencing, access and water supplies affected. With winter approaching, available feed levels are under pressure due to lack of grazing control. On some farms, loss of pasture through slipping is an issue with the major problem being slip debris covering good pasture areas.



- 2.6. The wet summer has had some positive impacts on tree survival and growth, with staff reporting exceptional pole growth. The downside has been on farms with severe soil slipping where younger trees have not been well enough established to withstand the slip events. In general, any pole sites under four years of age and forest blocks under five years of age have been susceptible to damage.
- 2.7. The work programme still appears to be largely on track. Some fencing programmes in the Tararua District will not be completed but the severely affected area is not extensive in the context of the regional SLUI programme and staff are now resuming farm visits and completing claims. In areas where landowners have suffered damage and have storm repair work to do staff are assuring them that their SLUI works can be rolled over into the next financial year.

### 3. RECOMMENDATION

That the Committee recommends that Council:

a. receives the information contained in Report No. 23-52.

### 4. FINANCIAL IMPACT

- 4.1. The report updates members on a number of financial matters associated with SLUI, Regional and Coast, and Nursery activities. Te Uru Rakau has a key role in part-funding and overseeing the SLUI section of this activity. The WRET has a key role in part-funding the WCS programme and have confirmed this years' funding support. Landowners are also significant co-funders of the works programme, having funded more than 50% of the works over the life to-date of the SLUI programme.
- 4.2. This item notes some potential financial impact associated with SLUI and WCS allocation levels. The level of expenditure and ability to achieve the Annual Plan targets requires some capacity for allocation levels to exceed budget as it is inevitable that some of the more than 800 SLUI, Environmental Grant and WCS works may not proceed as planned. Typical completion rates for SLUI are estimated to be approximately 70%. The financial impact from this item could range from under-expenditure of these programmes through to Council-approved over-expenditure.

### 5. COMMUNITY ENGAGEMENT

5.1. Consultation was carried out through the 2012-22 **Long Term Plan (LTP)**. Delivery of the SLUI and broader land management programme involves considerable community engagement, including discussions with landowners, catchment groups, meetings with farmer and industry groups (including the SLUI Advisory Group) and supporting forums/events through the Industry Partnership component of the programme.

# 6. CLIMATE IMPACT STATEMENT

6.1. This item reports on Horizons' activity in relation to our AP targets and is not considered to have a climate change impact. The Land Management activity includes a range of planting programmes, the benefits of which have been reported to Council in various items.

### 7. SIGNIFICANT BUSINESS RISK IMPACT

7.1. There is no significant business risk arising from this item. Some programme delivery risks are discussed within this item.



### 8. ANNUAL PLAN AND CONTRACT TARGETS

8.1. Progress on the AP and HCEF contract targets for the 2022-23 financial year are shown in Table 1 below. Further information on these targets is presented in the subsequent sections within this report.

Table 1: Annual Plan and HCEF contract targets 2022-23.

| Measure   | Annual<br>Plan | HCEF<br>Contract | Target |  |  |  |  |  |
|---|----------------|------------------|--------|--|--|--|--|--|
| Sustainable Land Use Initiative   |                |                  |        |  |  |  |  |  |
| Erosion reduction works programmes in targeted SLUI catchments (ha)   | 3,100          | 3,735            | 3,735  |  |  |  |  |  |
| Whole Farm Plan properties mapped per year (ha)   | 20,000         | 22,500           | 22,500 |  |  |  |  |  |
| Farm or paddock assessments mapped per year (ha)  |                |                  | 1,000  |  |  |  |  |  |
| Case study completed (number)   |                | 1                | 1      |  |  |  |  |  |
| Feasibility reports (number)  |                | 4                | 4      |  |  |  |  |  |
| Extension Plan  |                | 1                | 1      |  |  |  |  |  |
| Regional and Coast, Whanganui Catchment Stra  | tegy, Nurs     | ery              |        |  |  |  |  |  |
| Manage grant programmes to deliver erosion reduction works (ha)   | 175            |                  | 175    |  |  |  |  |  |
| Support industry initiatives that promote sustainable land use (number)   | 5              |                  | 5      |  |  |  |  |  |
| Operate Council nurseries and source additional commercial pole material to deliver poplar and willow poles to control erosion (number of poles). | 30,000         |                  | 30,000 |  |  |  |  |  |

### 9. SUSTAINABLE LAND USE INITIATIVE - OVERVIEW

- 9.1. The Sustainable Land Use Initiative (SLUI) was initiated after a major 2004 storm event which caused widespread damage across the Horizons region. The programme focuses on reducing hill country erosion to:
  - i. Build resilience to adverse events in the rural sector and region;
  - ii. Protect downstream communities and extend the life of flood protection assets; and
  - iii. Improve water quality in the region's waterways.
- 9.2. The context for the programme is that, compared to other regions, Horizons has the most hill country farmland and the greatest amount of Highly Erodible Land (HEL) in New Zealand. Over time, Horizons and its many partners have established SLUI which is one of, if not the largest erosion control programmes in New Zealand.
- 9.3. The 2022-23 SLUI programme is now in the final year of the current contract, with HCEF contracted to provide \$1.701 million and Horizons \$3.927 million.
- 9.4. SLUI has now completed more than 52,000 ha of work on 755 farms with 5,165 claims completed. More than 28 million trees have been planted and 1,934 km of fencing erected. Table 2 provides a detailed breakdown of SLUI outputs to date.



Table 2: SLUI works completed to 30 June 2022.

|                       | Farm plans | Number    | Hectares |               | Km of   |
|-----------------------|------------|-----------|----------|---------------|---------|
| Work type             | engaged    | of claims | treated  | Trees planted | works   |
| Afforestation         | 261        | 494       | 24,196   | 27,509,370    | 197.7   |
| Retirement            | 331        | 562       | 12,785   | 31,276        | 464.9   |
| Riparian Retirement   | 410        | 1175      | 4,992    | 273,119       | 1,095.2 |
| Wetland Retirement    | 102        | 244       | 330      | 72,237        | 102.0   |
| Managed Retirement    | 45         | 57        | 2,263    | 260           | 45.6    |
| Pole Planting         | 531        | 2440      | 7,854    | 307,457       | 11.8    |
| Structures/Earthworks | 43         | 49        | 164      | 2,060         | 14.2    |
| Other                 | 40         | 47        | 144      | 5,120         | 2.8     |
| Total                 | 755        | 5165      | 52,728   | 28,200,899    | 1,934.3 |

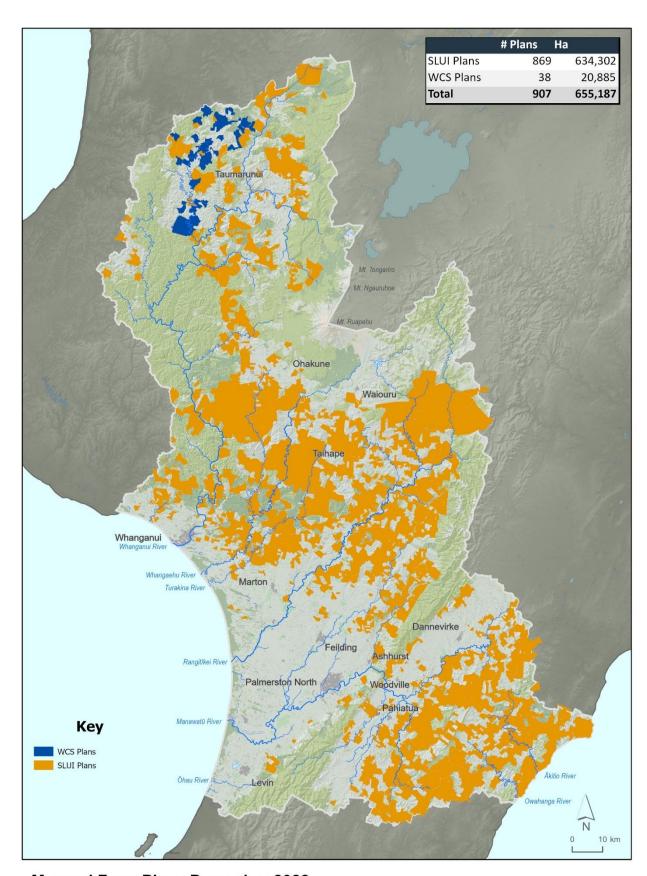
# 10. SLUI Whole Farm Plan (WFP) production

- 10.1. WFPs are a tool for bringing new land into the SLUI programme and for allocating grants to appropriate land types (priority land). There are now 907 full WFPs completed within the programme (Map 1) covering 655,187 ha of the 2.2 million ha in the Horizons region (30%).
- 10.2. Progress on the AP and HCEF contract targets for farm plans and farm mapping for the 2022-23 financial year are shown in Table 3 below.

Table 3: Annual Plan and HCEF contract targets and progress for WFP production.

| Measure  | Annual<br>Plan | HCEF<br>Contract | Target | Year to date | Predicted Result   |
|--|----------------|------------------|--------|--------------|--|
| Whole Farm Plan properties mapped per year (ha)        | 20,000         | 22,500           | 22,500 | 5,214        | Progress slow, but plans have been mapped though not yet supplied to Horizons. |
| Farm or paddock<br>assessments mapped per<br>year (ha) |                | 1,000            | 1,000  | 1,027        | Met target.  |

- 10.3. Most WFPs are completed under contract. There are 38 plans with the contractor at this stage (23,404 ha). Eleven plans (5,214 ha) have been completed and returned to Horizons to finalise. Mapping is continuing with contractors able to avoid the worst storm-damaged areas.
- 10.4. The target for farm or paddock assessments is usually completed internally by Land Managers. These assessments often cover situations where a one-off job is needed rather than a full plan, or where farms have been extended and a new plan is not required. There are 19 plans/jobs to map (3,848 ha) and two have been completed (1,027 ha).
- 10.5. There are 20 plans (8,954 ha) on the list or awaiting the paperwork to be returned by the landowners. New plans are prioritised according to the likelihood of them having high priority land needing to be treated. Much of the current demand for farm plans is linked to farmers wanting to get ahead of the new Government-mandated Freshwater Farm Plan requirements. The exact requirements of a Freshwater Farm Plan are not known yet and while a SLUI WFP will provide a very good base level for resource information, it is expected that it will not completely match the expectations of a Freshwater Farm Plan.
- 10.6. During the last nine months staff have delivered 28 new plans to landowners. This is a mix of plans completed last year and this year.



Mapped Farm Plans December 2022 Map prepared by W McKay, Catchment Operations Group on 17/01/2023

Map 1: Location of SLUI and WCS farm plans to December 2022 (updated annually).



# Assessment of active farm plans

- 10.7. The process of developing WFPs is a significant part of the SLUI budget and it is important to ensure that, where possible, plans are converted to actions (works on the ground). At the end of the 2021-22 financial year, 312 farms had completed 529 jobs in that year. To date in 2022-23, 273 farms have completed 321 jobs, with the full year applications totalling 376 farms and 733 jobs.
- 10.8. Active farm plans are assessed on the basis that they have completed some works in the last three years. At the end of June 2022, there were 490 active plans (55% of 896 plans completed at that time).
- 10.9. Over the life of the SLUI programme, 755 of the 911 (83%) of plans have completed at least one job and of the 156 plans that had not completed any works, some will have been new plans and are yet to start their programme. The reasons landowners get a plan but fail to complete works vary, but staff keep in contact with these landowners. During this reporting period two of these 156 plans have started a works programme, both where new owners had taken over the farms.

### 11. SLUI WORKS TARGETS

- 11.1. Progress on the AP and HCEF contract targets for erosion control works for the financial year are shown in Table 4 below.
- 11.2. In summary, the contracted annual works target for SLUI is 3,735 ha, up from 3,425 ha. The levels of allocation exceed this at present, however a completion rate of allocated work slightly higher than last year will be required to achieve the target. This is further discussed below.

Table 4: Annual Plan and HCEF contract targets and progress for erosion control works.

| Measure   | Annual<br>Plan | HCEF<br>Contract | Target | To Mar<br>2023 | Predicted Result  |
|---|----------------|------------------|--------|----------------|---|
| Erosion reduction works programmes in targeted SLUI catchments (ha) | 3,100          | 3,735            | 3,735  | 2,197          | Over-allocated to target but require a higher completion rate than last year to meet the target |

### **Achieving SLUI works targets**

- 11.3. The February report to Council outlined the process of over-allocation of funding and using reserves where necessary if there was a resultant overspend. At the February meeting, Council resolved to continue with this approach, noting if there were no reserves then any overspend would need to be accounted for in the following year's budget. In view of how the programme is tracking this year, an overspend of up to \$1.3 million can be expected. There is likely to be some savings in the operational SLUI budget to reduce this, but there is also a potential balance sheet variation due to changes to forestry valuations.
- 11.4. Reporting to Council on the land programme during the year, through the Integrated Catchment Management Committee and Audit and Risk Committee meetings, provides regular updates on the amount of work completed and allocated, and the separate statistics around the amount of grant funding spent and allocated. Results for this are typically presented as a range, due to the uncertainty involved.



### **SLUI Allocations in 2022-23**

11.5. This financial year (the fourth year of the HCEF contract) has an increase in work targets from 3,425 ha to 3,735 ha, and a grant budget increase from \$2.368 million to \$2.753 million. The current allocation levels are shown in Table 5 and Figure 1 below. These show that:

### November 2022

- 5,095 ha of works were allocated for a target of 3,735 ha (36% ahead of target); and
- \$4.507 million was allocated from a grant budget of \$2.753 million, which is \$1,754 million or 64% more than budget.

### March 2023

- 3,850 ha of work allocated (3% ahead of target); and
- \$4.033 million of grant cost (46% more than budget).

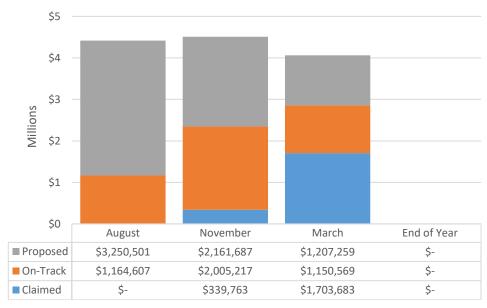


Figure 1: Grant allocation during the 2022-23 year to March 2023.

- 11.6. If the works on the books for March are all completed this would equate to a November completion rate of 75% (3,850 ha / 5,095 ha). However, this appears unlikely at this stage as much of the work to be completed is fencing with 216 jobs and a grant cost of \$1.44 million. Experience tells us some of this work will not be completed by 30 June.
- 11.7. For the first nine months of the year 2,197 ha (59% of target) of works have been completed (Table 6, Map 2) and claimed at a grant cost of \$1,703,683 (39% of budget). The progress of the work programme is very similar to the same time last year:

### March 2022

322 jobs completed, 2,122 ha of works claimed, \$1.808 million of grant paid.

# March 2023

- 321 jobs completed, 2,197 ha of works claimed, \$1.703 million of grant paid out.
- 11.8. No new work is being allocated to 2022-23. Work programmes for 2023-24 are being planned but the delay in decisions on the next four years of Central Government cofunding via the HCEF has meant we cannot actively promote next year's programme to landowners and we are now hearing that landowners are being told through various forums that there is no funding available next year. Without Government decisions and with uncertainty around the implications of over allocation this year on budgets next year, staff are finding it difficult to confirm work plans with landowners.



11.9. The E-grant and WCS grants are treated in a similar manner. This year, the WCS grant is over-allocated and will be managed by a percentage of work being unlikely to be completed and/or transferring work to other funding sources (i.e. the Freshwater or SLUI programmes).

Table 5: 2022-23 financial year erosion control works and grant allocations to 31 March 2023.

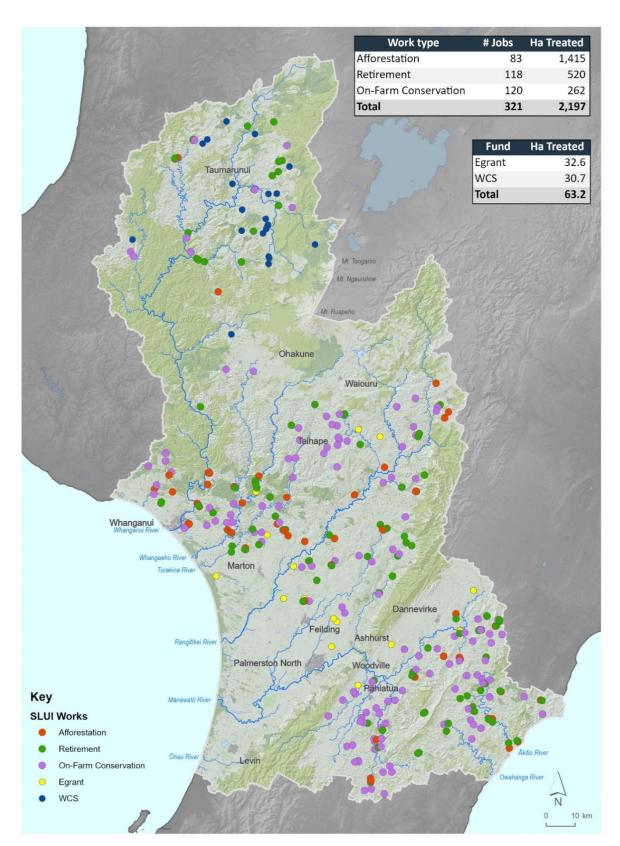
|                       | Hectares        |           |        |                          | Dollars \$ x 1,000 |           |           |                       |  |
|-----------------------|-----------------|-----------|--------|--------------------------|--------------------|-----------|-----------|-----------------------|--|
| Work type             | Contract target | Allocated | Actual | Actual<br>vs<br>contract | Contract<br>target | Allocated | Actual    | Actual vs<br>contract |  |
| Afforestation         | 1,740           | 1,751     | 1,415  | -325                     | 1,230,164          | 1,298,707 | 896,648   | -333,516              |  |
| Retirement            | 615             | 1,176     | 427    | -188                     | 241,000            | 1,045,457 | 312,119   | 71,119                |  |
| Riparian retirement*A | 220             | 409       | 83     | -137                     | 594,417            | 1,308,881 | 285,983   | -308,434              |  |
| Managed retirement    | 0               | 21        | 11     | +11                      | 85,000             | 12,835    | 5,117     | -79,883               |  |
| Space/gully planting  | 1,160           | 491       | 262    | -898                     | 562,825            | 350,134   | 203,566   | -359,259              |  |
| Structures/earthwork  | 0               | 2         | -      | -                        | 10,000             | 7,500     | -         | -10,000               |  |
| Other (inc. blank)    | 0               | 2         | -      | -                        | 30,000             | 9,500     | 250       | -29,750               |  |
| Total *B              | 3,735           | 3,850     | 2,198  | -1,537                   | 2,753,406          | 4,033,014 | 1,703,683 | -1,049,723            |  |

<sup>\*</sup>A - includes wetland retirement

Table 6: Works completed and claimed year to-date, by grant amount and land priority.

|                     |        |        |           | Hectares by Land Type |          |          |          |            |          |
|---------------------|--------|--------|-----------|-----------------------|----------|----------|----------|------------|----------|
|                     |        |        |           | Not                   |          | High     | Тор      | Yet to be  |          |
|                     |        |        |           | Erodible              | Erodible | Priority | Priority | classified |          |
| Work type           | Claims | Farms  | Grant \$  | (ha)                  | (ha)     | (ha)     | (ha)     | (ha)       | Total Ha |
| Afforestation       | 83     | 50 \$  | 896,648   | 186.1                 | 444.9    | 517.2    | 220.5    | 46.1       | 1,414.7  |
| Retirement          | 55     | 52 \$  | 312,119   | 10.2                  | 119.6    | 91.1     | 123.3    | 82.5       | 426.7    |
| Riparian Retirement | 49     | 44 \$  | 255,813   | 7.4                   | 21.1     | 15.2     | 19.8     | 4.2        | 67.7     |
| Wetland Retirement  | 12     | 10 \$  | 30,170    | 3.3                   | 8.3      | 0.1      | 3.4      | 0.0        | 15.1     |
| Managed Retirement  | 2      | 2 \$   | 5,117     | 3.1                   | 5.4      | 0.2      | 2.1      | -          | 10.8     |
| Pole Planting       | 119    | 114 \$ | 203,566   | 13.8                  | 145.7    | 68.3     | 20.0     | 14.5       | 262.3    |
| Other               | 1      | 1 \$   | 250       | 0.0                   | 0.0      | -        | -        | -          | 0.0      |
| Total               | 321    | 188 \$ | 1,703,683 | 223.9                 | 745.0    | 692.2    | 389.1    | 147.2      | 2,197.5  |

<sup>\*</sup>B – Annual Plan target is 3,100 ha while the SLUI contract target is 3,735 ha.



2023 Work type Locations

Map prepared by W McKay, Catchment Operations Group on 18/04/2023

**Map 2:** Location of all grant works completed to date in the 2022-23 financial year (SLUI, Regional and Coast and WCS from 1 July 2022 – 31 March 2023).



# Other SLUI / HCEF contract targets

11.10. Progress on the other HCEF contract targets for the financial year is shown in Table 7 below.

Table 7: Non-Annual Plan, HCEF contract targets and progress.

| Measure                       | Annual<br>Pland                        | HCEF<br>Contract | Target | To date | Predicted Result                                |  |  |  |  |
|-------------------------------|--|------------------|--------|---------|---|--|--|--|--|
|                               | Sustainable Land Use Initiative (SLUI) |                  |        |         |   |  |  |  |  |
| Case study completed (number) |  | 1                | 1      |         | On track  |  |  |  |  |
| Feasibility reports (number)  |  | 4                | 4      |         | May negotiate change to this milestone with MPI |  |  |  |  |
| Extension plan                |  | 1                | 1      | 1       | Met target                                      |  |  |  |  |

- 11.11. A large number of SLUI case studies have been completed to date, most concerning afforestation. This year's case study is yet to be completed but will involve an assessment of work completed and the impact of these works on a farm in the Ohura Catchment (Ruapehu District).
- 11.12. During the last few years, feasibility reports have concentrated on providing planting plans for afforestation. Originally these were developed to support landowners considering carrying out planting on their properties but as the reasons for planting have become more compelling, the feasibility report has and is developing into more of a planting plan outlining risk and providing information on riparian and no plant zones, rather than providing information to support planting.
- 11.13. A SLUI Extension Plan outlining target audiences and messages for the 2022-23 year has been completed. The plan includes Council reports, Annual Plan and Annual Reports, SLUI Advisory Group meetings, general public and more specific landowner targeted messaging. As noted, a delay by Central Government in reporting the outcome of the HCEF has delayed our communications to SLUI clients and the general public about next year's programme.

# Forestry Right – Forestry work programme

- 11.14. Horizons has interests in 10 forests covered by registered Forestry Rights (FR) with a net stocked area of 1,387 hectares. Maintaining the forests as outlined in the Forestry Rights document results in operational and capital expenditure, and operational work. Operational work includes rates, insurance, measurements, legal issues, liaising with landowners, fence and track maintenance; capital work relates mainly to forestry silviculture required in order to deliver the asset at the completion of the timber rotation. Forestry Rights information has been detailed in reports to Council.
- 11.15. Staff have begun contacting and meeting landowners with forests where Afforestation Grant Scheme funding was obtained. Owners of these forests have an opportunity to change their registration status under the Emissions Trading Scheme and Horizons has limited time to submit any requests to change the registration status as it must be completed before our next Mandatory Emissions Return is forwarded in June.
- 11.16. Forestry Rights work completed in this period includes:
  - Completion of an offer to purchase one of the FR forests;
  - Completion of individual summaries of the carbon within the trading register and likely accumulation at the end of the emissions return period for each FR with an AGS component. This is an aid to helping landowners make informed decisions on changing the registration status of their forests;



- Completion of insurance schedule and insurance cover, noting no hail strike, landslip
  or infrastructure cover was able to be obtained. Cover is essentially limited to
  windstorm and fire;
- Assessment of FR forests for damage following storm events showed negligible damage to stands and only minor tracking damage.

# **River Management Forests**

- 11.17. As a part of the move to an integrated catchment management approach, Land Management Staff have provided advice to the River Management Team coordinated an inventory of all River Management forests to assess their status under the Emissions Trading Scheme. This has identified some deforestation of pre-1990 forest blocks.
- 11.18. Under the Emissions Trading Scheme, Horizons were issued carbon credits relating to pre-1990 forests in Goulter's Gully, Kumeti Stream and Rangitīkei River, totalling 109 hectares. There were nine individual blocks within the Rangitīkei River totalling 46 ha.
- 11.19. Three stands have been identified as being deforested without the correct notification and one stand of 1.46 ha meets the deforestation criteria of a maximum of 2.0 ha. The other two stands, of 5.98 ha and 2.94 ha, were removed for river management purposes but meet the deforestation criteria under the ETS and potentially will have deforestation liabilities and penalties.
- 11.20. A report has been prepared and submitted to Horizons carbon agent. This report outlines areas of un-notified deforestation and provides background on why the forests were cleared. The carbon agent will lodge this report with Ministry for Primary Industries on Horizons behalf.
- 11.21. Land management staff have worked with the River Management Team to provide training on carbon credits and liability. Further work with the River Management Assets Team has added flags in the asset register for existing forest stands and the ETS obligations that come with them.

#### 12. REGIONAL AND COAST PROGRAMME

12.1. The Regional and Coast programme is funded through the General Rate. The programme includes land-use and erosion control advice, grants for erosion control works (Regional and Coast and WCS), working with industry to support sustainable land use, delivering the soil health programme and soil health advice, and providing erosion and land-use consent and compliance advice. Progress against the Annual Plan targets is discussed further in the sections below.

## **Environmental Grant and Whanganui Catchment Strategy**

- 12.2. The Annual Plan target for these programmes is merged as shown in Table 8 and the programme is managed as shown in Table 9 to deliver on this overall target. The Environmental Grant funding aims to support landowners to undertake works that will reduce erosion and protect the environment.
- 12.3. The Regional Land and Coast (RL&C) environment grant is slightly broader than SLUI and can include work on sand country dune stabilisation and on smaller holdings and lifestyle blocks. The Whanganui Catchment Strategy (WCS) grant is supported by the Whanganui River Environmental Trust (WRET). This enables a greater variety of work to be funded and at higher grant rates in targeted areas in the upper sub-catchments of the Ohura and Waimiha rivers.
- 12.4. Staff presented a financial update to WRET at the end of February.
- 12.5. The budgets were over-allocated as a mechanism to ensure funds are fully spent and, as with SLUI, not all jobs are expected to be completed.



- 12.6. There were 120 jobs allocated across WCS and RL&C grant projects with 41 completed and claimed to date. These jobs account for 72 ha of works against the target of 175 ha.
- 12.7. Of the 120 jobs allocated, 48 are for space planting, 33 for riparian retirement, 16 retirement, 13 afforestation and 10 for wetland retirement.
- 12.8. There is a significant over-allocation of funding within the WCS grant projects. Of the 61 jobs approved, three have subsequently been cancelled and four have been transferred to Freshwater funding, saving approximately \$31,000 of grant funding. Further jobs may be transferred to both Freshwater and SLUI, where jobs would be eligible within the WCS farm plans.

Table 8: Annual Plan Regional and Coast WCS targets and progress erosion works.

| Measure   | Annual<br>Plan | HCEF<br>Contract | Target | To date | Predicted Result        |
|---|----------------|------------------|--------|---------|-------------------------|
| Manage grant programmes<br>to deliver erosion reduction<br>works (ha) | 175            | na               | 175    | 72      | On track to meet target |

Table 9: RL&C and WCS target - allocated, completed year to-date by work area and budget expenditure.

|               | Work Area (ha) |           |          |                  | Budget (\$)           |           |          |                  |
|---------------|----------------|-----------|----------|------------------|-----------------------|-----------|----------|------------------|
| Grant<br>Type | AP<br>Target   | Allocated | Complete | AP %<br>Complete | AP<br>Budget          | Allocated | Complete | AP %<br>Complete |
| wcs           | 75             | 132       | 37       | 49               | 117,000 <sup>*1</sup> | 206,939   | 45,699   | 39               |
| RL&C          | 100            | 103       | 35       | 35               | 80,000                | 66,675    | 27,469   | 34               |
| Total         | 175            | 235       | 72       | 41               | 197,000               | 273,614   | 73,168   | 37               |

<sup>\*1 -</sup> this is \$50,000 Horizons and \$67,000 WRET

## Regional Land and Coast - Industry Partnerships

- 12.9. The Industry Partnerships programme works to support industry initiatives that promote sustainable land use. The Annual Plan targets for this activity are shown in Table 10.
- 12.10. Horizons currently have contracts in place to support the New Zealand Farm Environment Trust, who run the programme, and the **Poplar and Willow Research Trust (PWRT)**. There are a number of smaller funded projects and sponsorships.

Table 10: Annual Plan RL&C and WCS targets and progress for industry partnerships.

| Measure   | Annual<br>Plan | HCEF<br>contract | Target | To date | Predicted result |
|---|----------------|------------------|--------|---------|------------------|
| Support industry initiatives that promote sustainable land use (number) | 5              |                  | 5      | 9       | Target exceeded  |

- 12.11. At least nine industry groups have been supported this year: Ballance Farm Environment Awards (BFEA) and PWRT, Beef and Lamb New Zealand, Farmed Landscape Research Centre (Massey University), Middle Districts Farm Forestry Association, Taumarunui Sustainable Land Management Group, SCION Forest Flows project and workshops, Landwise Workshop and a large number of catchment groups. This is also the final year for Horizons contributing to two winter cropping research trials (one for sediment and nutrient loss from sheep winter grazing and one using catch crops to sow after grazing to lessen sediment and nutrient loss, and one final report has been received with the other due in late May).
- 12.12. The 2022-23 Horizons Region BFEA programme was completed with the winners field day held on 12 April. Further information will be presented at this meeting.



- 12.13. Staff attended and participated at a number of workshops and field days including:
  - Beef and Lamb Intensive Winter Grazing, Trees on Farm and Stream Health; and
  - Catchment Groups advice to a number of groups including Upper Ongarue group (Ruapehu District) where staff supported Kaitieke and Ongarue schools.
- 12.14. The national policy-level work continues with staff supporting internal teams in preparing for the introductions of freshwater farm plans, including how to present catchment context and values and how we can make information available for farm planners and plan certifiers. At an on-farm level, staff continue to be questioned by landowners on the new regulations. Property visits almost always include discussion with landowners on interpretations and advice on steam fencing rules, intensive winter grazing, He Waka Eke Noa, freshwater farm plans and changes to the Emissions Trading Scheme.

## **SOIL HEALTH**

- 12.15. The Soil Health programme maintains the Regional State of the Environment soil quality monitoring programme through a regional network of soil health assessments and a general advice programme about soils and soil health.
- 12.16. Staff have completed establishment of the soil quality sampling network for the region with two new sites established during spring 2022. There are now 101 sites installed and 43 have been re-measured. Autumn sampling has yet to commence.
- 12.17. The Land Information Group has also provided advice and assistance, including:
  - implementations of the NES Highly Productive Land, and how to map this land at a district level;
  - Provided specialist support to Land Team staff on complex erosion control problems in the Pohangina, Oroua and Rangitīkei catchments including a four hectare slump in what was rolling highly productive land, and severe gully erosion;
  - Producing a template for an Erosion and Sediment Control Plan for the next round of SLUI work;
  - Checking through imagery from Cyclone Gabrielle and updating our understanding of erosion protection work; and
  - Supporting Land staff with field mapping of SLUI plan extensions.

#### **NURSERIES**

12.18. Horizons owns two poplar and willow pole nurseries (at Woodville and Bulls) to produce planting material for erosion control programmes. With funding support from WRET, we also provide management support to a number of farmer-owned nurseries in Ruapehu District. The Annual Plan Target (Table 11) is to produce and source 30,000 poles per season and we have completed that this year with the winter 2022 production.

Table 11: Annual Plan RL&C and WCS targets and progress for nurseries.

| Measure   | Annual<br>Pland | HCEF<br>Contract | Target | To date | Predicted Result |
|---|-----------------|------------------|--------|---------|------------------|
| Operate Council nurseries and source additional commercial pole material to deliver poplar and willow poles to control erosion (number of poles). | 30,000          | n/a              | 30,000 | 31,366  | Met target       |

12.19. Nursery management during summer includes pruning, thinning, mulching, mowing, pest control and fertiliser applications with the work carried out by the nursery manager and contractors. Growth in all the nurseries has been slightly better than normal, boosted by good rainfall but lacking the heat and sunshine hours that would have made it an



- exceptional season. We were fortunate to miss the damage caused by storm events where the Hawkes Bay nursery was under around two metres of water and the Northland nursery had a wind event that toppled all their one-year growing stools.
- 12.20. The preliminary stocktake was carried out in late March and has allowed us to give estimates to land managers about numbers and varieties available this winter. A final stocktake in May will confirm numbers. There is high demand for material of all grades with a lot of interest from outside our region. Our priority is to supply erosion control programmes within our region before any on-sales are considered.
- 12.21. The early stocktake indicates about 35,000 2.5-3.0 metre poles from Horizons and Matatoa nurseries and there are at least six on-farm nurseries which would normally add another 1,000-plus poles.
- 12.22. Staff met at the Bulls nursery with the Manawatū District Council nursery manager as they are considering establishing pole production at their nursery in Feilding.
- 12.23. A nursery managers' meeting was held virtually this year, after storm after-effects precluded the meeting scheduled for Hawkes Bay in mid-February. A working group was formed to put forward requests to the Poplar and Willow Research Trust for research to support nursery production.
- 12.24. The overgrown shelterbelts at Woodville were finally trimmed. After numerous requests for quotes from contractors dating back more than 18 months, a company from the Bay of Plenty undertook the work. This involved closing the road with associated traffic management costs.



Figure 2: Shelterbelt trimming at Woodville (Photo - Sara Mathieson)

12.25. Irrigation – a meeting was held with the irrigation consultant and the Consents Team regarding water supply for the irrigation proposal. A follow-up site visit is required with a freshwater scientist from Horizons. The ability to secure a water supply for the irrigation proposal at the Woodville nursery is the current focus as the project cannot progress without this.



#### 13. PROGRAMME ACTIVITY

# Staff activity since the last report

- 13.1. Since the last report staff have:
  - Met with the new MPI on-farm advisers;
  - Sent staff to the Horizons Central District Field Days site;
  - Received and answered queries about afforestation, space planting and the Emissions Trading Scheme;
  - Met with the Rural Support Trust in Tararua District to understand farmer needs and the support and advice that Horizons can supply. This includes clarifying consent requirements for replacing infrastructure, especially culverts, and land management erosion and reinstating slips;
  - The Land and Partnerships Manager is seconded part-time to the Tararua District Recovery team as the Natural Recovery Leader;
  - Issued a press release on how Horizons and the SLUI programme can support farmers in storm-affected areas with advice and grants where available;
  - Developed an internal staff document outlining learnings from 2004 to Cyclone Gabrielle in terms of erosion control:
  - Staff were invited to present at: Whanganui Rotary, Ladies Long Lunch, Love Your Land and Lincoln University student field trip;
  - Staff provided specialist advice to a number of landowners with complex erosion concerns, including Ernslaw Forestry staff seeking re-seeding advice following a large earth movement in a mature pine forest, slump erosion in the Mangatewaiiti Stream and river bank planting Manawatū River near Oringi all within the Tararua District.
  - Staff have responded to numerous requests for erosion advice, including some from lifestyle blocks around Whanganui;
  - Supported consents and compliance with on-farm land-use inspections as requested;
  - Provided land-use consenting advice regarding vegetation clearance, earth disturbance and culverts, and
  - Carried out upskilling and training, including two Landcare Research Webinars barriers and opportunities for planting native trees on-farm, and Wetlands and Your Farm Environmental Plan.





**Figure 3:** General landscape photo showing moderate to severe erosion from Cyclone Gabrielle – east coast, Tararua District (photo supplied by GNS).

# Upcoming activity in the next three months

- 13.2. In the next three months, until the end of June, staff will:
  - Await the announcement of the new funding application by Central Government then start communicating what that means for our SLUI programme;
  - Hold a SLUI Advisory Group meeting in June;
  - Continue to contact landowners to confirm or postpone their 2022-23 works programmes and to complete new applications for 2023-24;
  - Complete claims;
  - Deliver and discuss works programmes for newly completed farm plans;
  - Complete the 2022-23 March, May and June Milestone reports for SLUI;
  - Continue to liaise with Freshwater and Biodiversity teams about joint projects;
  - Continue to support the Tararua District recovery programme, providing staff to support community meetings as necessary;
  - Support compliance with intensive winter grazing monitoring;
  - Develop a draft template for a simpler version of a SLUI WFP Erosion and Sediment Control Plan, with input from landowners and other support partners; and
  - Continue to support the national and regional response to Central Government's Freshwater Farm Plan programme.

## 14. SIGNIFICANCE

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

Grant Cooper

Dr Jon Roygard

LAND & PARTNERSHIPS MANAGER

**GROUP MANAGER CATCHMENT OPERATIONS** 

**ANNEXES** 

There are no attachments for this report.



| Report No.               | 23-53            |
|--------------------------|------------------|
| Information Only - No De | ecision Required |

# **BIODIVERSITY, BIOSECURITY & PARTNERSHIPS PROGRESS REPORT**

## 1. PURPOSE

1.1. The purpose of this item to update members of Council's Integrated Catchment Committee on progress made in the Catchment Operations Group's Biodiversity, Biosecurity and Partnerships activity during the 2022-23 financial year and the period 1 January to 31 March 2023.

#### 2. EXECUTIVE SUMMARY

- 2.1. The biodiversity, biosecurity and partnerships programme update is reported in three main sections in this report: Biodiversity, Biosecurity Animals and Biosecurity Plants.
- 2.2. The non-regulatory Biodiversity programme is designed to implement Horizons' overarching biodiversity strategy as contained in the One Plan. The programme is structured to complete work to protect priority habitats, and support community biodiversity through five icon sites, two targeted rate projects and a contestable biodiversity fund. The other aspect of the non-regulatory biodiversity programme is management of Totara Reserve Regional Park.
- 2.3. During the reporting period, the Biodiversity programme was interrupted due to the weather events. The priority habitats programme currently has six priority sites allocated for a target of 11 and the Kanorau Koiora Taketake biodiversity contestable fund is currently open for applications while Tōtara Reserve was significantly impacted by Cyclone Gabrielle with the campground closed for the season.
- 2.4. The Biosecurity Animals programme is predominately focussed on possums, rooks, rabbits and wallabies i.e. the four pest animals identified in the **Regional Pest Management Plan 2017-37 (RPMP 2017-37)**. As well as the RPMP-related activity, Horizons operates an Amenity Pest programme to support landowners, particularly in peri-urban areas, with pest management.
- 2.5. The possum control programme is slightly behind schedule for the year, and after nine months (75% through the year), the programme had 66% of the planned possum control operations treated and had completed 72% of the planned total of bait station fills. This reflects some possum control operations being partially completed and an approach of adding bait stations and completing additional treatment during the delivery of operations to improve the overall results. Additional work is planned to provide more possum control in the priority sites of the biodiversity programme.
- 2.6. The Biosecurity Plants programme is also predominately focused on activity to implement the <a href="RPMP 2017-37">RPMP 2017-37</a>, which includes 66 species of pest plants. Horizons funds and coordinates pest plant control for 18 plant species and a further 11 species inside individually managed zones. Activity includes responding to new incursions, establishing and monitoring biocontrol, and coordinating activity with other stakeholders and agencies, as well as a small education/advocacy programme. The programme also co-ordinates the Central North Island Wilding Conifer Programme by administering Central Government funding to a range of other agencies and enabling additional work in Horizons' region.



2.7. The Biosecurity Plants programme has completed surveillance and response to a range of plant species including alligator weed, Sagittaria, knotweed, Senegal tea and velvet leaf. A range of biocontrol projects have continued including release of field horsetail weevils at Pūtiki in Whanganui, and iwi consultation on biocontrol agents for purple loosestrife are underway.

## 3. RECOMMENDATION

That the Committee recommends that Council:

a. receives the information contained in Report No. 23-53.

## 4. FINANCIAL IMPACT

4.1. There is no financial impact associated with recommendations in this paper.

## 5. COMMUNITY ENGAGEMENT

5.1. This is a public item and therefore Council may deem this sufficient to inform the public.

## 6. SIGNIFICANT BUSINESS RISK IMPACT

6.1. It is considered that there is no significant risk impact of this item.

## 7. CLIMATE IMPACT STATEMENT

7.1. This item reports on Horizons' activity in relation to the Annual Plan targets for the Biosecurity and Biodiversity implementation of the Catchment Operations Group and is not considered to have a climate change impact. Some of the activities included in the item will have some climate impact as part of operational delivery, e.g. travel to undertake the activity, and some activities will have a positive climate change impact. An overall assessment of the impact of these individual activities on climate change has not been undertaken, however these will be included within the analysis of the overall activity by Horizons Regional Council (Horizons).

## 8. BIODIVERSITY

- 8.1. Horizons non-regulatory biodiversity activity includes:
  - The Priority Habitats programme, which has a goal "to maintain or restore the full range of the region's indigenous ecosystems to a healthy and functioning level; and
  - The Biodiversity Partnerships programme, which has a goal of "Empowering communities to reconnect with and improve biodiversity". This programme includes:
    - Five icon projects Te Āpiti Manawatū Gorge, Pūkaha Mount Bruce, Bushy Park Tarapuruhi, Kia Whārite and Manawatū Estuary;
    - Two Targeted Rate projects Rangitīkei old mans' beard control and the Waitārere Community Biodiversity Project; and
    - The <u>Kanorau Koiora Taketake</u> contestable indigenous biodiversity fund for community biodiversity projects.
  - Tōtara Reserve Regional Park Management.
- 8.2. Progress against Annual Plan targets for the 2022-23 year is shown in Table 1 below and further detail on each of the programmes is provided in the sections below.



Table 1: Progress reporting for the Biodiversity Activity Long-term Plan targets for 2022-23.

| Long-term Plan Target   | Target | Allocated | Completed or supported | % of target completed |  |
|---|--------|-----------|------------------------|-----------------------|--|
| Protect/enhance priority habitat remnants   |        |           |                        |                       |  |
| Additional priority habitats actively managed.  | 11     | 6         | 0                      | 0%                    |  |
| Support community involvement in biodiversity protect   | ion    |           |                        |                       |  |
| Support existing community-based biodiversity improvement projects.   | 12     | 25        | 2                      | 17%                   |  |
| Tōtara Reserve Regional Park  |        |           |                        |                       |  |
| Annual report on the management of Tōtara<br>Reserve Regional Park for biodiversity and<br>recreational values, including managing the camping<br>facility. | 1      | 1         | 1                      | 1                     |  |
| Science & Innovation - Biodiversity Long-term Plan targets for 2022-230.  |        |           |                        |                       |  |
| Annual report on biodiversity monitoring and research activity.   | 1      | 1         | 0                      | 0                     |  |

# **Priority Habitats**

8.3. Access to sites has been restricted with an exceptionally wet spring and summer preventing access to many properties. Cyclone Gabrielle impacted site visits, particularly in the Tararua and Pohangina/Oroua areas and this, combined with a more rigorous selection process for new sites being brought on for management and staff changes, has caused significant delays in confirming new sites and establishing work programmes for the year. A summary of the site selection progress is shown in Table 2 below.

Table 2: Progress reporting for the Priority Habitats targets for 2022-23.

| Activities towards Priority Habitat Recruitment Target                                      | Number of Sites |
|---|-----------------|
| Target for additional Priority Habitats sites for 2022-23                                   | 11              |
| Sites accepted into the Priority Habitats programme to date.                                | 6               |
| Pending landowner acceptance or similar. Sites visited, assessed and accepted by committee. | 3               |
| Sites visited, assessed, and declined by committee.   | 10              |
| Sites in the process of being visited and assessed.   | 7               |
| Sites identified but not yet assessed.  | 4               |
| Total number of sites investigated.   | 30              |

- 8.4. Included in new Priority Habitats sites this year is a 28.25 ha site of MF1 tōtara and tītoki forest. This is notable because remnants of ecosystems of this type are usually less than 10 ha.
- 8.5. Horizons continues to maintain the 73 existing sites on the managed list. Particular highlights include the completion of retirement deer fencing around the region's most significant remnant of swamp maire forest (Figure 1) and the discovery of several rare *Powelliphanta* (giant land snails) at another site, where only two snails had been previously identified.
- 8.6. Biodiversity and Regional Response teams have been working together to enhance possum control within Priority Habitats sites, identifying where additional bait stations and monitoring would be of benefit. Approximately 150 additional bait stations are planned and implementation of these improvements is underway.





**Figure 1:** Recently completed deer-proof fence around Broadlands wetland complex. (R.Fleeson)

# **Biodiversity Partnerships - Icon and Targeted Rate Projects**

8.7. The Biodiversity Partnerships programme includes Icon and Targeted Rate projects (Table 3) and Kanorau Koiora Taketake – Indigenous Biodiversity Community Grant Projects.

 Table 3: Biodiversity Partnerships icon and targeted rate projects for 2022-23.

| Icon projects                                 | 2022-23 FY (excluding GST) |
|---|----------------------------|
| Te Āpiti Manawatū Gorge                       | \$327,829                  |
| Te Āpiti Manawatū Gorge Capital carry forward | \$49,000                   |
| Kia Whārite                                   | \$155,100                  |
| Pūkaha Mt Bruce                               | \$34,716                   |
| Bushy Park Tarapuruhi                         | \$20,680                   |
| Manawatū Estuary                              | \$31,807                   |
| Targeted rate projects                        | 2022-23 FY (excluding GST) |
| Rangitīkei Environment Group (REG)            | \$98,230                   |
| Waitārere Community Biodiversity Project      | \$19,738                   |
| Total   | \$737,100                  |

# Te Āpiti

8.8. Four new signs have been approved by **Tararua District Council (TDC)** and iwi for installation. This will include wetland information and a swamp maire sign at the Ferry Reserve wetland; a memorial at Ferry Reserve where trees were planted to commemorate WWI and WWII servicemen; and a welcome at the Ballance (Tararua) end carpark. Several new flora and fauna identification and information signs have also been installed



- along the walking tracks with the two remaining signs to be installed at the same time as the Ballance carpark sign.
- 8.9. Animal and pest plant control is a mainstay of Horizons' input into and around the reserve. The pest plant contract work within Te Āpiti is progressing as expected due to weather restraints, with the annual budget 50% spent. An aerial survey was completed in February and showed a marked decrease in old man's beard within the contract area.
- 8.10. The Te Āpiti Governance Group are scheduled to meet on 5 May and one of the main items on that agenda is an update on a project to complete the assessment of the 15 projects identified in the Te Āpiti Manawatu Gorge Master Plan, along with three additional and complementary projects. Two supplementary projects one for Rangitāne ki Tāmaki nui a Rua and separate one for Ngāti Kahungunu ki Tāmaki nui-a-Rua. Another potential "next steps" project was identified through the project assessment and was also assessed, as it fits with available external funding.

## Kia Whārite

8.11. Predator trapping has continued to be undertaken on a regular basis in the Rētāruke, Manganui o te Ao and Whanganui River Catchments for whio (blue duck) protection, and in the Waimarino area for kiwi protection.

# Pūkaha Mt Bruce

- 8.12. Operational activities at Pūkaha were presented at a Technical Advisory Group meeting in March. Key areas discussed included sourcing funding to support old man's beard control; deer control options; and the need to reduce stoat numbers to zero if kiwi support is continued.
- 8.13. The pest plant ground control contract work was completed in February. This work covers the northern buffer area on private land, and some control work within the reserve near the northern boundary.

## Manawatū Estuary

- 8.14. The Manawatū Estuary Management Team (MEMT) held the first of its biannual meetings for 2023 on 10 March. A main topic of the meeting was to ensure the various groups represented will work together when undertaking a joint review of the Manawatū Estuary Management Plan 2015-25 (MEMP) administered by the Department of Conservation (DOC); and the Foxton Beach Coastal Reserves Management Plan 2009 (FBCRMP) administered by HDC.
- 8.15. An outcome of this approach is a proposed series of seven topic-focused workshops one month apart. This approach allows the community and organisations involved to capture the requirements needed to not only best manage the estuaries' needs but also the community aspirations to enable the estuary to thrive, as opposed to just survive. The approach will include further regular meetings over the next 18 months to gain input from all agencies and groups.
- 8.16. There have been further delays for the installation of the 'No vehicle' signs around the dune garden section of the estuary, however the signs were expected to be galvanised and installation in April.

## Bushy Park Tarapuruhi

- 8.17. Bushy Park Tarapuruhi hosted one of three national celebrations for the Forest and Bird 100th anniversary (Figure 2). Horizons participated with a stall promoting our grants programme and wider activities.
- 8.18. Bushy Park Tarapuruhi received funding for a tītipounamu translocation through the 2021-22 Kanorau Koiora Taketake Indigenous Biodiversity Community Grant. The translocation was postponed and was due to take place in April with local hapū participation at the beginning and end of the journey.



8.19. More than half of Horizons annual operational grant for Bushy Park Tarapuruhi has been spent with the majority on pest plant control, arborist contracting, repairs to the predator-proof fence and predator monitoring. The remaining funds have been allocated and are on track to be spent by the end of the financial year.



Figure 2: Forest and Birds' 100-year Big Birthday Bash at Bushy Park, attended by Horizons

## Waitarere Beach

8.20. A dune expert, Jim Dahm, has provided advice on how best to enhance the natural flora of the dunes and a plant trial is planned for this year that aims to inform the best options for ongoing planting. Weed control contractors were due in April to continue work started last year while also preparing the plant trial site for a community planting day.

# Rangitīkei Environment Group (REG)

8.21. The Rangitikei Environment Group are on-track with their work programme, having been guided by a recent survey of the five Forest and Bird Reserves. Pest plant control is well underway with work in one of the reserves completed for the year. The group continues their promotional work to gather new sites and capture the work undertaken.

# **Biodiversity Partnerships - Contestable Fund**

8.22. The 2022-23 Kanorau Koiora Taketake - Indigenous Biodiversity Community Fund programmes are well advanced with their projects. Ten of the 18 projects have most of their funding spent while he remaining eight groups have allocated the funding awarded and are on track to complete their projects by the end of the financial year. Some examples of the work underway are shown in Figure 3.





Figure 3: Successful 2022-23 groups harvesting spinafex seed (left) and recording kills.

8.23. The planning for the 2023-24 Kanorau Koiora Taketake was developed and ready for its launch on 1 April. Staff will evaluate the applications and make recommendations to the Councillor panel, to be considered at a meeting chaired by Councillor Emma Clarke on 9 June.

## Tōtara Reserve Regional Park

8.24. Tōtara Reserve is Horizons only Regional Park. The activity to manage the area includes the biodiversity and biosecurity work at the site and the management of the camping ground. Horizons Annual Plan target for Tōtara Reserve is to provide an annual report on activity. This item provides the Annual Report for 2022-23.

## Spatial plan

- 8.25. The Tōtara Reserve Advisory Group meeting in February 2023 received an evaluation of the Spatial Plan. This categorised the 100-plus recommendations into five categories: Cultural Framework, Track Management, Forest Health, Campground Management and Communication. These will be assessed over the next two years to enable a considered strategic approach to developments at the Reserve.
- 8.26. The next meeting of the advisory group is scheduled for 10 August 2023.

#### Cyclone Gabrielle Impacts

- 8.27. The camping season was brought to an abrupt halt after Cyclone Gabrielle, when floodwaters crossed the campgrounds. All buildings were damaged except Camp Rangi Woods. Kererū Campground damage was relatively minor but required refurbishment of the playground and the offices. Kahikatea Campground was severely affected with the pump shed collapsed, pumps needing replacement, grounds needing thick silt and logs removed (Figure 4) and the river armouring to be reinstated. By the end of March the grounds were cleared and areas re-grassed while infrastructural damage was being assessed and costed.
- 8.28. The walking tracks are open except Gilchrist Track, the majority of which was covered with silt and part of the track slid into the river.
- 8.29. The financial impact of the floods on Totara Reserve and campground are yet to be fully calculated with decisions on expenditure for different levels of service, or to reinstate all that has been damaged to a functional condition still to be made. Significant funds were spent to ensure the camping grounds were reinstated to a useable and maintainable state, and debris and silt placed sympathetically to allow future use. Depending on the final assessments of buildings and infrastructure, and the amounts able to be recovered from insurance, we are estimating at least \$200,000 to enable camping to begin by Labour



Weekend 2023 but potentially more if track re-instatement/building, and river protection works are deemed necessary.





Figure 4: Staff clean-up day at Kahikatea Campground (left) and flood-carried silt ingress into the totara forest.

# Pest animal control

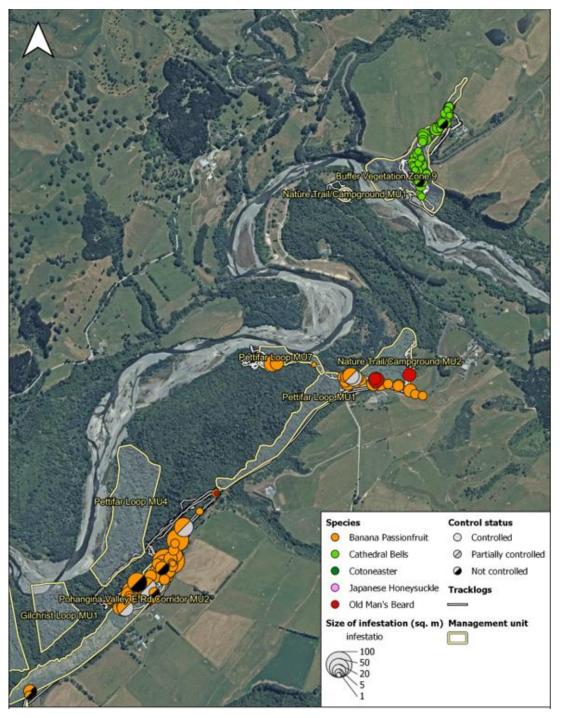
- 8.30. The trap lines and monitoring tunnels were assessed after Cyclone Gabrielle with most traps requiring cleaning and fixing. Twelve traps required replacement and tracking tunnels on the lower flats all needed removing and cleaning, but are now all back in place.
- 8.31. The priority since Cyclone Gabrielle for animal pest work has been getting all damaged and lost devices reinstated so it is ready for next season's rat control and monitoring.
- 8.32. Bait stations for rat control were filled in September, earlier than planned due to monitoring showing a high rat tracking in August 2022. November's rat monitoring showed two lines tracking very high and two that tracked zero. The high area bait stations were filled again in December. There are 153 predator traps in and around the reserve that are checked monthly.
- 8.33. The Possum Control Operation that surrounds and includes Tōtara Reserve began in March. The planned possum monitor was not done due to effort being put into reinstalling the pest control and monitoring infrastructure. Monitoring will be conducted once the control work is completed.

# Pest Plant control

- 8.34. Enhanced pest plant control has been enabled this year through funding from the priority habitats project. Two rounds of control were carried out for pest plants of high threat to the valuable native ecosystems of the Reserve. This work has been informed by a comprehensive pest plant survey undertaken in November 2021, and builds on initial control work undertaken in 2021-22. At this stage of the control programme, key species targeted include banana passionfruit, cathedral bells, cotoneaster, Japanese honeysuckle, old man's beard and Chilean rhubarb. An overview of the control work as at mid-April is shown in Map 1, which also shows the locations of the Management Units (MU) and Buffer Vegetation Zones discussed further below.
- 8.35. Follow-up work within Buffer Vegetation Zone 5 (south of the Reserve) shows promising results this season, with no Chilean rhubarb found in the valley system where mature and juvenile plants were controlled last year.



- 8.36. Priorities remaining for the season include another control sweep of the cathedral bells infestation in Buffer Vegetation Zone 9 as the seed bank in this area is being controlled twice annually, given the species fast rate of maturity.
- 8.37. Other planned work includes survey and control of any remaining isolated mature banana passionfruit in Upper Fern Walk (MU1); and continuing control of significant banana passionfruit infestations along the Pohangina Valley East Road Corridor (MU2), where approximately three hectares have already received control this season. If time, budget and conditions allow, there may be control of old man's beard and banana passionfruit in Gilchrist Loop (MUs 1-2) and some initial control of jasmine and English ivy in the Pettifar Loop (MU1, MU4, and MU8).



**Map 1:** Map of pest plant control work completed so far this season in the northern half of Tōtara Reserve (as of 14 April 2023).



#### 9. BIOSECURITY ANIMALS

9.1. The Biosecurity Animals programme contributes to the delivery of the Horizons Regional Pest Management Plan objectives, focusing on the animal pests identified in the plan i.e. possums, rooks, wallabies and rabbits. The Amenity Pest Programme is also part of this activity. Progress against Annual Plan targets as at the end of March 2023 is shown in Table 4 with further detail provided below.

**Table 4:** Progress reporting for the Biosecurity Animals Annual Plan targets as at 31 March 2023.

| Performance measure/ contract target   | Target      | Progress   |
|--|-------------|--|
| Possum densities are maintained at/below 10% residual trap catch (RTC) in all existing and new possum control operations. This is to enhance production, biodiversity, disease protection, and amenity values. | <10%<br>RTC | 33 of the planned 40 monitors have been completed with an average result of 3.9% RTC (+/-1.3%). Three PCOs have returned results above 10% RTC.  |
| All additional hectares released from OSPRI control are included in the Possum Control Operations (PCOs) programme   | 0%          | There are no new hectares in the 2022-23 year.   |
| All known rookeries are treated annually to reduce crop losses and damage.   | 100%        | Access granted to rookery that was not treated in previous year.   |
| Provide an urban/peri-urban animal pest management service to assist ratepayers with specialist advice and equipment. All enquiries responded to within two working days.                                      | 100%        | 130 enquiries were received during the reporting period and all enquiries were followed up within the agreed timeframes. The total number of enquiries followed up this year to date is 357. |

## **Possums**

#### <u>Overview</u>

- 9.2. The Possum Control Programme, which started in 2006 and covered 110,000 ha, has grown as other areas have been added including areas previously controlled by OSPRI, which exited after achieving its objectives.
- 9.3. The Horizons region is divided into 166 **Possum Control Operations (PCOs)** ranging in size from approximately 900 to 27,000 hectares (Map 2). Currently the programme works 153 PCOs covering 1,568,248 hectares. NB: an estimated 5% of the total area comprises areas within the voluntary programme that are opted out.
- 9.4. A further 13 OSPRI areas are likely to be added over the next 3-12 years as OSPRI completes its work in these areas. It is unlikely any of these will be available for inclusion until the 2024-25 year.
- 9.5. Decisions are made annually on which PCOs will be treated, based on monitoring results, predicted density and the time since the area was last treated. The current policy is that a PCO may be deferred for one year but will be treated the following year i.e. each PCO is treated at least once every two years. The annual planning session for the upcoming 2023-24 financial year was held during the reporting period.

# 2022-23 progress

- 9.6. This year the programme aims to control possums over 90 operational areas with an estimated 112,000-plus bait stations programmed to be visited and refilled. The total area of the 90 PCOs being worked this year is 913,514 hectares (Map 2).
- 9.7. After nine months i.e. 75% of the financial year, the possum control programme had completed 66% of planned PCOs and 72% of the target bait station fills completed for the financial year to the end of March 2023 (Table 5). This is considered slightly behind where the programme should have been at that point of the year. The larger percentage of bait station fills compared to PCOs completed reflects some PCOs being in progress and some

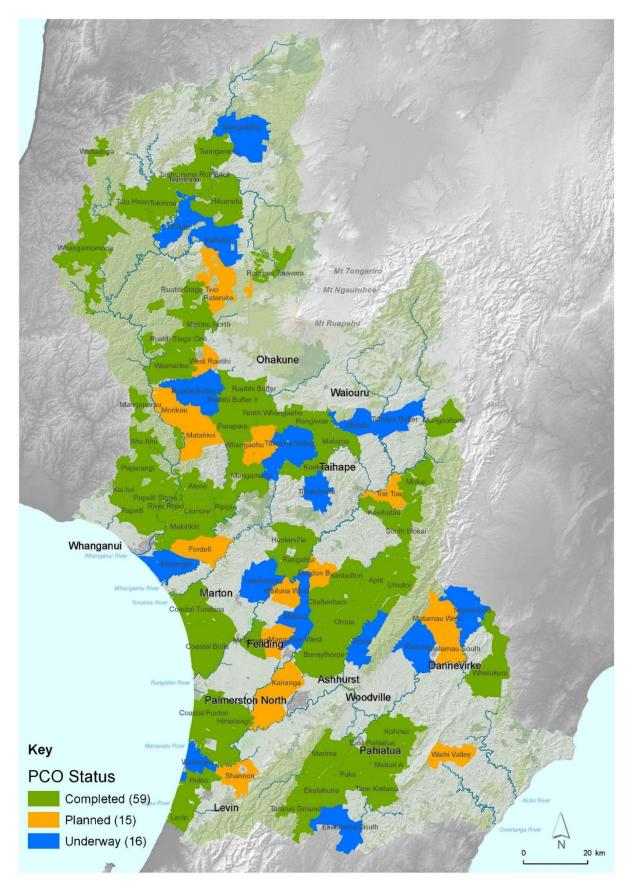


- PCOs or parts of PCOs having additional (e.g. second) treatments and additional bait stations being installed to assist with treatment.
- 9.8. In this period the Horizons' Regional Response Team completed control work in 17 PCOs and had work underway in 10 others. The external contractors completed control work in seven PCOs and had commenced work in another five operations.
- 9.9. Eight PCO monitors were completed during this reporting period with the results ranging from 0.1% to 9.3% RTC and the average across these eight monitors being 4.2% RTC (+/-1.4%). Another three monitors were planned in April with the remaining four monitors to be completed in May-June. Thirty-three monitors are now finished (Map 3) with the results averaging 3.9% RTC (+/-1.3).
- 9.10. Of these eight recent monitors, three operational areas had returned results over 7.5% RTC. Tatu Heao and Umutoi PCOs havd both improved, with a similar reduction of 3% RTC since the last monitoring cycle in the 2018-19 year, and we expect this trend to continue with ongoing control work. The Tane Kaitawa result has increased after the operation was deferred in the 2019-20 and 2021-22 years, and showed higher rat interference on the wax-tags retrieved this last monitor, indicating more sustained control work is required in this operational area.

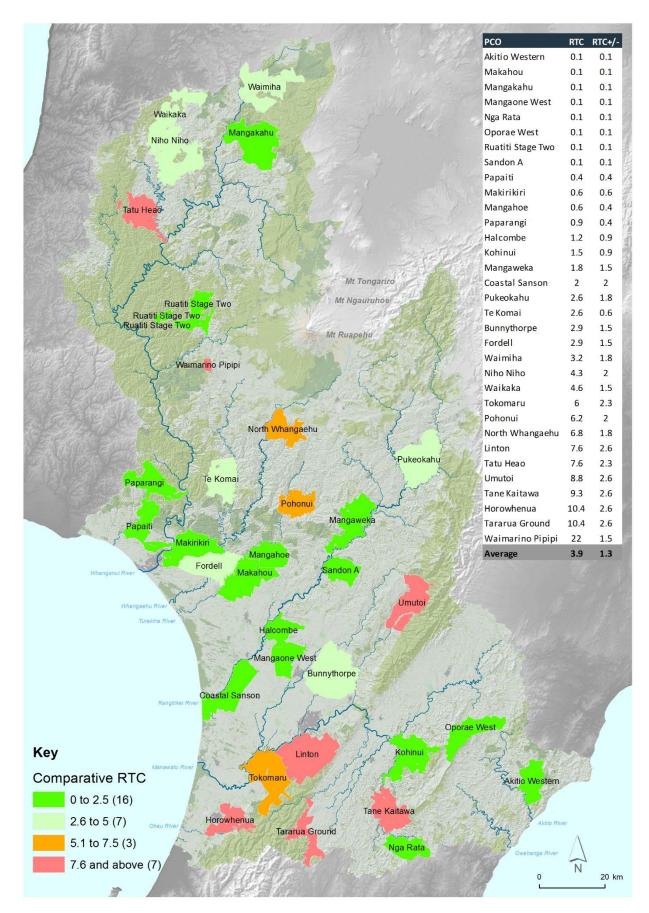
**Table 5:** Progress reporting for the Possum Control Programme Annual Plan targets as at 31 March 2023.

| March 2023.         |                        |                         |             |        |                   |            |
|---------------------|------------------------|-------------------------|-------------|--------|-------------------|------------|
| Measure             | F                      | Reporting Perio         | d           |        |                   |            |
| Hectares            | Period 1<br>July – Dec | Period 2<br>Jan - March | Period 3    | Total  | Op Plan<br>Target | % Complete |
|                     |                        | Regional Re             | sponse Team |        |                   |            |
| PCOs completed      | 22                     | 17                      |             | 39     | 60                | 65%        |
| Bait stations       | 27,687                 | 17,759                  |             | 45,446 | 61,750            | 74%        |
|                     |                        | External (              | Contractors |        |                   |            |
| PCOs completed      | 13                     | 7                       |             | 20     | 30                | 67%        |
| Bait stations       | 23,810                 | 11,897                  |             | 35,707 | 51,074            | 70%        |
| Total PCO Programme |                        |                         |             |        |                   |            |
| PCOs completed      | 35                     | 24                      |             | 59     | 90                | 66%        |
| Bait stations       | 51,497                 | 29,656                  |             | 81,153 | 112,824           | 72%        |





Map 2: Possum Control Programme as at 31 March 2023.



Map 3: Year-to-date possum monitoring July 2022 to 31 March 2023.

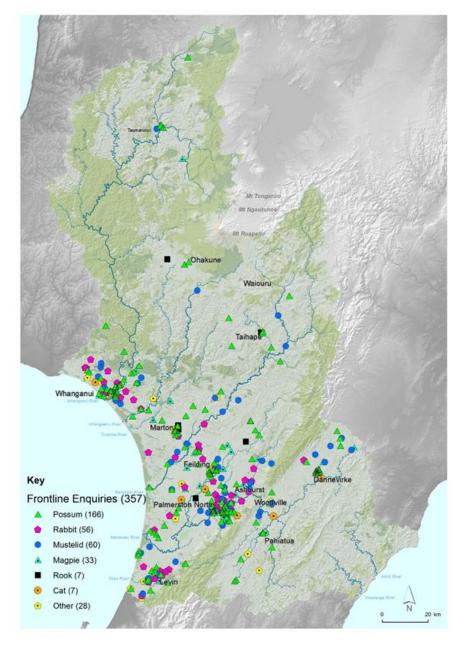


#### Rooks

- 9.11. The rook programme results for the 2022-23 year were reported in the February Integrated Catchment Committee report and are not repeated here.
- 9.12. In March crop damage near Dannevirke was followed up with the rooks pre-fed twice before the poison line was laid, and it is estimated that of the estimated 101 rooks, 62 were killed. As well as reducing damage to crops, this is predicted to reduce the number of nests needing to be treated next season.

# **Amenity Pests**

9.13. The amenity pest programme responded to 130 enquiries during the reporting period. The highest number of calls were received about issues with possums followed by mustelids and rabbits. All landowners making enquiries were contacted within the prescribed timeframes and provided with advice and, in some cases, equipment (traps etc.) and small amounts of toxins to help them deal with their particular pest issues. Enquiries were received from across the region (as shown in Map 5).



Map 4: Regional distribution of amenity animal pest enquires July 2022 – March 2023.



## **Biodiversity Support Animal Pest Control**

9.14. The Animal Pest team provide enhanced pest control at a number of Icon and Priority Habitats locations across the region with results and locations shown in Figure 5, which is a view from the Possum Control Dashboard used to track programme inputs and results from each trap used.



Figure 5: Locations and year-to-date tally of pests removed from icon and priority habitat sites.

## 10. BIOSECURITY PLANTS

- 10.1. The Biosecurity Plants programme is predominately focussed on activity to implement the Regional Pest Management Plan (RPMP) 2017-37, which includes 66 species of pest plants. Horizons funds and coordinates pest plant control across the region for 18 plant species and a further 11 species inside individually managed zones.
- 10.2. Biosecurity Plants activity also includes responding to new incursions, establishing and monitoring biocontrol, coordinating activity with other stakeholders and agencies, as well as a small education/advocacy programme which includes the "Check Clean Dry" advocacy for freshwater biosecurity. The programme also coordinates the Central North Island Wilding Conifer Programme, administering Central Government funding to other agencies including several Department of Conservation (DOC) offices (Hawkes Bay, Taupō and Whakapapa) and other regional councils (Waikato and Hawkes Bay). Brief updates on the Annual Plan targets are shown in Table 6 and the sections below.

Table 6: Progress reporting for the Biosecurity Plants Annual Plan targets.

| Performance Measures for Levels of Service   | 2022-23   | Progress YTD   |
|--|---|--|
| Any exclusion category pest plants that are found in the Region are promptly managed, with an initial response plan completed within two weeks and then enacted (if not enacted before two weeks). | Number of response plans required. Percentage where a response plan was produced within two weeks (target 100%) Number of response plans enacted with their specified timeframes (target 100%). | One response remains in progress after <i>Sagittaria platyphylla</i> (delta arrowhead), an aquatic plant, was confirmed in Pioneer Highway drain and the Mangaone River in November 2020. The site was again excavated in February 2023. |
| Number of managed sites at zero-levels (ZL) increases for pest plants identified   | Overall percentage of managed sites at ZL increases by 10% per  | ZL% levels to date are at 84%.   |



| Performance Measures for Levels of Service  | 2022-23   | Progress YTD   |
|---|---|--|
| for eradication in the Regional Pest<br>Management Plan.  | annum, from the start date of the RPMP; 2022-23 target is 79%.  |  |
| Number of managed sites at zero-levels increases for pest plants identified as progressive containment – mapped in the Regional Pest Management Plan. | Overall percentage of managed sites at ZL increases by 10% per annum from the start date of the RPMP; 2022-23 target is 78% | ZL% levels at the start of the year were 74%.  |
| Financially support the national biocontrol agent development programme and report annually to Council on this programme.                             | Financial support provided and annual report to Council.  | On track. Financial commitment to be paid by 30 June 2023.   |
| Monitoring of some released biological agents will be completed to assess establishment and host damage (using the national protocol).                | 20 assessment plots will be monitored.  | This has been achieved with various agents including old man's beard gall mites, tutsan beetle, Sydney golden wattle wasp, broom gall mite, green thistle beetle and <i>Tradescantia</i> beetle, and yellow spot fungus. |
| Pest plant enquiries received are responded to within three working days.   | 95% of enquiries to be responded to within three working days.  | 100% of enquires to date have been responded to within three days.   |

# **Regional Pest Management Plan**

10.3. The objectives for the various species are provided in the RPMP 2017-37 and at a basic level, with some comments on year-to-date progress in Table 7, and with further detail on the programmes provided in the sections below.

**Table 7:** Activity summary for Biosecurity Plants Regional Pest Management Plan activity 1 January to 31 March 2023.

| Aim                       | Programme                                 | Key Deliverables   | Period Progress   |  |  |
|---------------------------|---|--|---|--|--|
| Preventing establishment  | Exclusion<br>Programme                    | Keep unwanted pest plants that are not already present out of Horizons region.         | Continued inspections of dump site for Sagittaria. No plants found. Surveillance will increase around the area used to desiccate excavated plants through 23/24 season due to the effects of Cyclone Gabrielle. Pioneer Drain excavated in February 2023.   |  |  |
| Eradicating               | Eradication<br>Programme                  | Controlling and reducing the prevalence and extent of Eradication species.             | Species targeted for control this period were; African feather grass, alligator weed, blue passion flower, bomarea cathedral bells, Chilean rhubarb, Chinese Pennisetum, climbing spindleberry. Himalayan balsam, knotweed, purple loosestrife, Senegal tea, nassella tussock, and woolly nightshade. |  |  |
| Rolling back              | Progressive<br>Containment<br>Programme   | Contain and reduce the geographic distribution of the pest plant to an area over time. | Species controlled this period were old man's beard, banana passionfruit, contorta pine, Darwin's barberry, and moth plant.   |  |  |
| Maintaining low densities | Progressive<br>Containment –<br>un-mapped | Ongoing control to reduce species' impact and spread to other properties.              | Site inspections for production plants and responding to boundary complaints. Two boundary complaints were resolved without requiring compliance action.  |  |  |



# **Highlights**

## Alligator weed

10.4. Continued surveillance of the Mangaone Stream yielded seven new sites of alligator weed and two sites of regrowth, with all sites treated using both chemical and physical methods (Figure 6). Two sites, located next to the Tremaine Ave Bridge and Te Wanaka Road end, were excavated in January and March respectively. A third site, between Tremaine Ave and Botanical Road, was to be excavated in April.



Figure 6: Alligator weed excavation underway at Tremaine Ave Bridge.

## <u>Sagittaria</u>

10.5. The Pioneer Highway drain was excavated in February as part of the ongoing control of Sagittaria platyphylla. The dump site for this material at the end of Tip Road was inundated by the Manawatū River during Cyclone Gabrielle but the site was bunded, greatly reducing the likelihood of plant material being moved. Increased surveillance of the immediate vicinity of the site will be undertaken next season to ensure no plants are present outside it

## **Knotweed**

10.6. Ongoing surveillance and control of knotweed at the Kentucky Fried Chicken, Princess Street restaurant in Palmerston North has revealed the plant has spread into neighbouring properties. The robust root system has enabled it to extend underneath a large office building and appear in the gap between the concrete and the building (Figure 7) – a distance of about 10 metres.





Figure 7: Knotweed under a lean-to next to KFC Princess Street.

## Senegal tea

10.7. Horizons has taken on management of the Senegal tea site at McCrae's Bush in Ashhurst from Palmerston North City Council, after surveys of the waterway on neighbouring properties revealed plants had spread from the original known site. The site was controlled in January before Cyclone Gabrielle inundated the area.

#### Sea spurge

10.8. Horizons has continued to support the response led by Ministry of Primary Industries (MPI) for sea spurge, by assisting with monitoring of known sites and surveillance across dune areas between known sites. Surveillance between Waitarere and the Manawatū River mouth was conducted in January with no plants found. DOC have seconded a staff member in a liaison role which covers Horizons, Taranaki and Wellington regions where sites have been found. Horizons will continue to assist with this response and will have input into the formation of a national strategy and oversight group being developed by MPI.

#### <u>Velvetleaf</u>

10.9. In early February and again in mid-March, velvetleaf surveys were undertaken on properties where the plant has been previously found. A paddock in one of the properties had been planted in fodder beet this season and a total of 25 velvetleaf plants removed, none of which had yet dropped seed. All other properties were clear of the plant.

## Enviroschool engagement

10.10. In late-February and late-March, two Enviroschools days were held for Northern Rangitikei and Manawatu schools respectively with a focus on pest plants (Figure 8). Students learnt about the work Horizons does to manage pest plants, including learning about the pest plants in our plan, the control methods we utilise and our biological control programme. Both days were a success with positive feedback received from students, parents and teachers.

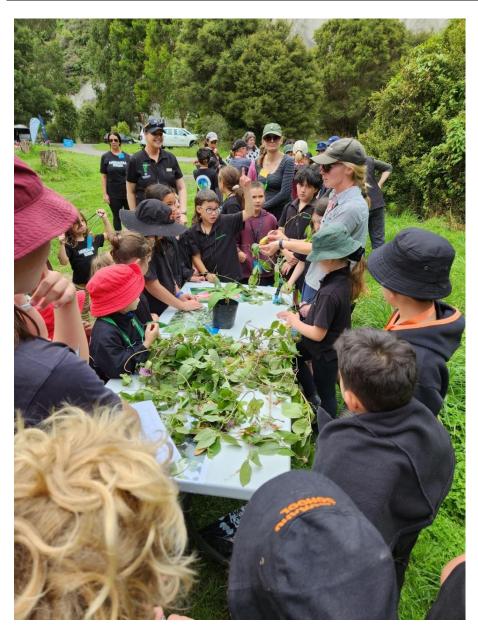


Figure 8: Pest Plant team at Mangaweka Enviroschools day talking about plant identification.

## Field horsetail

10.11. In January, 270 field horsetail weevils were released at a site in Pūtiki, Whanganui, as part of our collaboration with Manaaki Whenua-Landcare Research (MWLR) for the biological control of field horsetail. Monitoring of the release is ongoing with establishment yet to be confirmed. Positive signs indicating establishment have been found at least two locations in Rangitikei District.

## Purple loosestrife

10.12. Iwi consultation has commenced for the purple loosestrife biocontrol application that we are preparing with MWLR. Three Question and Answer sessions were held via zoom over three nights with attendees from four different iwi groups and a hui was planned for April with the Muaūpoko Tribal Authority, which has the largest infestation in Horowhenua within their rohe.

# Old man's beard

10.13. Joint aerial surveys were conducted in January for old man's beard in the western Ruahines, with DOC surveying the forest park and Horizons surveying the adjoining land.



Following completion of the surveys, a meeting was held between Horizons and DOC to discuss areas of control both in the park and adjacent to it. An agreement was reached for funding for this season to control both DOC reserves adjacent to the forest park, the forest park itself and adjoining private property with adjusted boundaries for control work. Another meeting is scheduled for the end of the season to discuss results from the control works and longer term commitment from both agencies to the programme.

## Good Neighbour Rule responses

10.14. There were five Good Neighbour Rule responses for a variety of species and types of landowners (Table 8).

Table 8: Summary of Good Neighbour Rule activity for the period.

| Description   | 2022-23 January-March totals |
|---|------------------------------|
| Boundary complaints received and actioned outside of compliance | 5                            |
| Required to Clear notices (RTCs) issued                         | 0                            |
| Notices of Direction (NODs) issued                              | 0                            |
| Notices resolved in this period                                 | 0                            |

# **National Wilding Conifer Control Programme**

- 10.15. Horizons has \$42,000 (20%) left of a budgeted \$215,200 programme to finish, which is planned for May.
- 10.16. Of the overall Central North Island programme of \$1,113,850 across all five Partner organisations, there was \$469,189.30 (42%) remaining unspent at 31 March 2023.
- 10.17. No health and safety incidents have been reported. Contractors are being audited by Project Managers or third party organisations, and MPI have also instigated helicopter operator audits with a range of mostly process corrective actions required.

## 11. SIGNIFICANCE

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

Craig Davey
BIODIVERSITY & BIOSECURITY MANAGER
Dr Jon Roygard
GROUP MANAGER CATCHMENT OPERATIONS

#### **ANNEXES**

There are no attachments for this report.



| Report No.               | 23-54            |
|--------------------------|------------------|
| Information Only - No De | ecision Required |

## FRESHWATER & PARTNERSHIPS PROGRESS REPORT

## 1. PURPOSE

1.1. The purpose of this item to update members of Council's Integrated Catchment Committee on progress made in the Catchment Operations Group's Freshwater and Partnerships activity during the 2022-23 financial year and the period 1 January to 31 March 2023.

## 2. EXECUTIVE SUMMARY

- 2.1. The Freshwater and Partnerships programme includes freshwater implementation work that spans riparian fencing and planting, fish barrier identification and remediation, community project support and funding, work as part of the Manawatū and Lake Horowhenua Accords, and non-regulatory support for some upgrades to wastewater treatment plants and their associated discharges.
- 2.2. The programme is organised into the six Central Government co-funded projects the two remaining Freshwater Improvement Fund projects (Manawatū and Lake Waipu), the Waikawa Community Environment Fund project and the three Jobs for Nature projects (Regional Stream Fencing and Riparian Planting, Enhancing Fish Populations through Enhancement of Fish Passage and the Horowhenua Freshwater Management Unit Water Quality Interventions). Other projects include the broader work programme that covers the Lake Horowhenua weed harvesting work as part of Lake Horowhenua Restoration rates programme.
- 2.3. Overall, the programme is on track to deliver on the range of riparian fencing and planting, fish passage restoration and community project targets.
- 2.4. The two land treatment projects for Rātana and Tokomaru, as part of Freshwater Improvement Fund (FIF) projects both aimed to move to 100 percent land discharge of wastewater within the five years of the FIF projects that end on 30 June 2023. Both are now working to revised work programmes that extend beyond the completion of the FIF programme.
- 2.5. The Lake Horowhenua Restoration programme has continued with lake weed harvesting completed in December 2022 in partnership with the Lake Horowhenua Trust and Muaūpoko Tribal Authority. The Horowhenua Freshwater Management Unit Water Quality Interventions Jobs for Nature has progressed across its range of objectives including completing further science and lodging an application to be able to use the Fast Track consenting process for the Arawhata wetland project.
- 2.6. The Annual Plan target requires an annual report to Council on the Waipu Catchment Freshwater Improvement Fund project (also referred to as the Rātana FIF) and an annual report on lake restoration activity including the Jobs for Nature Fund project for Lake Horowhenua. These are included in this item.
- 2.7. With the Freshwater Improvement Fund projects coming to completion, funding from the Manawatū Accord targeted rate has been allocated to support the Regional Jobs for Nature Riparian Fencing and Planting project next financial year. To continue to support community projects for freshwater improvement, a regional freshwater community projects fund has been established through the draft Annual Plan. The application process for this is scheduled to be opened in early May 2023, with applications closing at the end of June 2023.



#### 3. RECOMMENDATION

That the Committee recommends that Council:

a. receives the information contained in Report No. 23-54 and Annex.

#### 4. FINANCIAL IMPACT

4.1. There is no financial impact associated with recommendations in this paper.

# 5. COMMUNITY ENGAGEMENT

5.1. This is a public item and therefore Council may deem this sufficient to inform the public.

## 6. SIGNIFICANT BUSINESS RISK IMPACT

6.1. It is considered that there is no significant risk impact of this item.

## 7. CLIMATE IMPACT STATEMENT

7.1. This item reports on Horizons' activity in relation to the Annual Plan targets for the Freshwater implementation of the Catchment Operations Group and is not considered to have a climate change impact. Some of the activities included in the item will have some climate impact as part of operational delivery, e.g. travel to undertake the activity, and some activities will have a positive climate change impact, e.g. the planting of riparian trees. An overall assessment of the impact of these individual activities on climate change has not been undertaken, however these will be included within the analysis of the overall activity by Horizons Regional Council (Horizons). The overall stocktake for Horizons will also include the Land Management Activity work to establish trees in the region, which is a further component of the Catchment Operations Group's operational delivery.

## 8. FRESHWATER & PARTNERSHIPS

- 8.1. The Freshwater and Partnerships programme includes:
  - Two Freshwater Improvement Fund (FIF) programmes one for Lake Waipu near Rātana (Section 9 below) and one in the Manawatū Catchment as part of the Manawatū River Leaders Accord (Section 10 below);
  - Three Jobs for Nature (JFN) Projects Regional Stream Fencing and Riparian Planting (Section 11 below), Enhancing Fish Populations through enhanced fish passage (Section 12 below), and the Horowhenua Freshwater Management Unit Water Quality Interventions project (Section 14 below);
  - A Community Environment Fund project for Waikawa Catchment, which was transferred from the NZ Landcare Trust to Horizons (Section 13 below); and
  - The Lake Horowhenua Restoration rate activity which includes the lake weed harvesting, maintenance and operation of both the sediment trap and fish pass, and components of the Horowhenua JFN project funding (Section 14 below).
- 8.2. An overview of targets, works complete and allocation levels for the riparian fencing and riparian planting, fish passage remediation and community projects (combined across all projects) is provided in Table 1 below. NB the targets for the Waikawa project are merged into the JFN project totals. The additional contractual and Annual Plan targets are reported on further in the sections below.



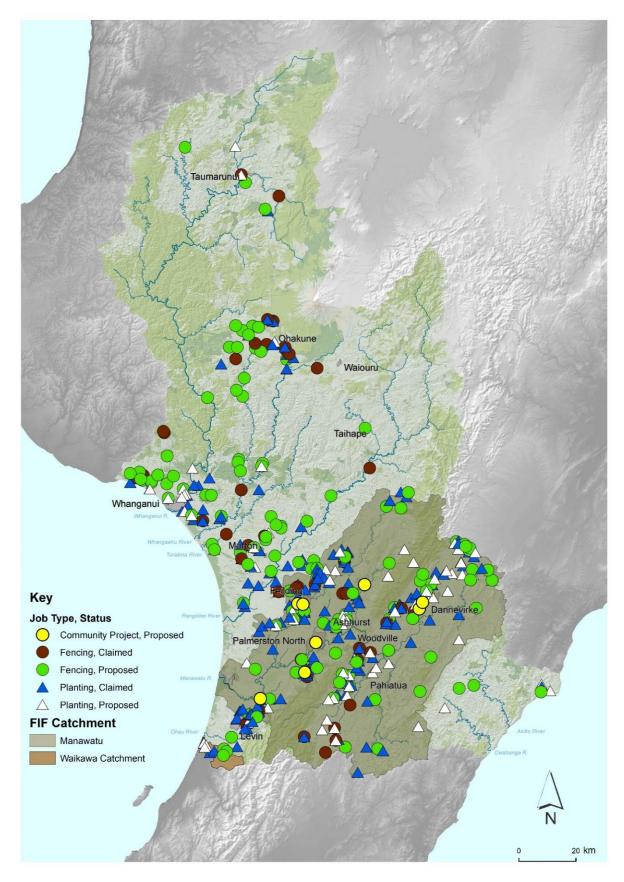
Table 1: Freshwater and Partnerships programme progress against the 2022-23 Annual Plan (AP) and Waikawa contract targets (not included in the AP) as at 31 March 2023.

|                                 |                   | Riparian fe | encing (km)       | ·                          |                         | Riparia   | n planting   |               |
|---------------------------------|-------------------|-------------|-------------------|----------------------------|-------------------------|-----------|--------------|---------------|
|                                 | Target            | Allocated   | Complete          | %<br>complete <sup>1</sup> | Target                  | Allocated | Complete     | %<br>complete |
| Jobs for<br>Nature &<br>Waikawa | 106.6<br>AP (105) | 132         | 30.3 <sup>2</sup> | 28.9%                      | 103,000<br>(AP 100)     | 104,388   | 67,559       | 68%           |
| Manawatū<br>FIF                 | 50                | 60.5        | 7.5               | 15%                        | 40,000                  | 81,624    | 52,915       | 132%          |
| Total <sup>1</sup>              | 156.6<br>AP (150) | 192.5       | 37.4              | 24%                        | 143,000<br>(AP 140,000) | 186,012   | 120,474      | 84%           |
|                                 |                   |             | Fish passes       | S                          |                         | Cor       | nmunity proj | jects         |
|                                 | Target            | Allocated   | Complete          | %<br>complete <sup>1</sup> | Target                  | Allocated | Complete     | %<br>complete |
| Jobs for<br>Nature              | 7                 | 76          | 26                | 371%                       | n/a                     | n/a       | n/a          | n/a           |
| Manawatū<br>FIF                 | 4                 | 3           | 0                 | 0%                         | 9                       | 10        | 2            | 22%           |
| Total <sup>3</sup>              | 11                | 79          | 26                | 237%                       | 9                       | 10        | 2            | 22%           |

<sup>&</sup>lt;sup>1</sup>Completed to target. <sup>2</sup> Includes 431 metres in Waikawa catchment

<sup>&</sup>lt;sup>3</sup>Note: The totals in these tables represent an overall total and achieving these totals does not necessarily mean all AP targets have been met, as the targets for work programmes are in the AP as individual targets.





**Map 1:** Stream fencing, riparian planting, fish passage remediation and community projects completed through the Regional Stream Fencing and Riparian Planting Jobs for Nature and the Manawatū FIF projects.



# 9. LAKE WAIPU/RĀTANA - FRESHWATER IMPROVEMENT FUND (FIF) PROJECT

- 9.1. Horizons' Long-Term Plan (LTP) 2021-31 includes a target of an annual report to Council on the Waipu Catchment FIF project. The information below provides an overview of the works completed in the Lake Waipu FIF project during the 2022-23 financial year and during this reporting period. This is the annual report for the 2022-23 financial year.
- 9.2. The Lake Waipu FIF project has two main components: the first, being led by Horizons, is the development of a lake restoration plan (including monitoring) to inform the plan; and the second component, being led by Rangitīkei District Council (RDC), seeks to establish land treatment of wastewater from the Rātana community, to remove the discharge from the lake.
- 9.3. The development of the restoration plan has been contracted to Cawthron Institute. Cawthron staff interviewed surrounding landowners and project partners in September 2022 to gain an understanding of their values and aspirations for the lake and an initial assessment of scientific data collected to date has shown no major gaps of information required to inform the restoration plan. The preparation of the lake restoration plan has continued during the reporting period and a joint hui with project partners and stakeholders was scheduled for the end of April 2023 to present the draft findings and seek feedback prior to finalisation of the report. This report will be completed prior to the end of June 2023.
- 9.4. During the financial year RDC have purchased the land required for the irrigation to occur and the title for the land has been issued. RDC have lodged a resource consent application with Horizons and RDC for the irrigation of treated wastewater onto the land. This consent application is currently being processed with both RDC and Horizons, having requested further information from the applicant via Section 92 of the Resource Management Act 1991 (RMA). The RDC response has been submitted and Horizons' response is forecast to be submitted in mid-May 2023.
- 9.5. Depending on the assessment of the responses, there is a possibility that the application will need to either be limited or fully publicly notified. The timeframes for processing the resource consent application (RDC and Horizons) mean that it is very unlikely that the project will be completed prior to December 2023. Discussions with the Ministry for the Environment (MfE) about the possibilities of extensions for the project will be required.

# 10. MANAWATŪ RIVER LEADERS ACCORD INCLUDING FRESHWATER IMPROVEMENT FUND (FIF) PROJECT

# Manawatū River Leaders' Accord

- 10.1. The Manawatū River Leaders Forum met on 17 March 2023 at the Palmerston North Convention Centre. Topics discussed included:
  - The announcement of the interim co-chair, Oriana Paewai, and an update on the process to find a permanent co-chair;
  - An update on the Matauranga framework and aligning the development of the updated Manawatū Accord and Action Plan with this framework;
  - An update on the Longburn Fonterra replacement resource consent application;
  - Presentation on the State and Trends of water quality in the Manawatū River;
  - Presentation on the Manawatū Accord Action Plan reporting progress:
  - Update on progress for the final year of the Manawatū Freshwater Improvement Fund and announcement of the new Regional Freshwater Community Grants for the 2023-24 financial year.
- 10.2. The next Manawatū River Leaders Forum is scheduled for 21 July 2023.



## Manawatū Catchment Freshwater Improvement Fund project

- 10.3. The Manawatū FIF project is in its fifth and final year with the work programme scheduled to be completed by 30 June 2023. Further work will be needed beyond June to complete final reporting and audit process. The project governance group meets quarterly, aligned with the quarterly reporting to MfE.
- 10.4. The work programme includes the following work packages:
  - The Tokomaru wastewater land treatment project This sub-project is being led by Horowhenua District Council (HDC). This project set out to move the treatment of wastewater to a 100% land discharge within the five years of the project, removing the need to discharge this wastewater to the Manawatū River. The project plan was updated in 2021-22, received by the Governance Group and included in the annual work plan with MfE. This new schedule of work involves design for the land application system, completed in late 2023, and commissioning of the system programmed for 2024. This falls outside of the timeframe of the FIF project, which is due to finish 30 June 2023. NB: A variation to the Deed of Funding has been proposed, and is currently being worked through, to allow the overall objective of land disposal to occur outside the timeframe of the FIF project.
  - The urban streams project, led by Palmerston North City Council (PNCC), has completed a range of projects during the last four years focusing on the development of walkways and planting alongside streams in the Palmerston North area, and the urban eels project. The project has recently focussed on the Green Corridors throughout the Turitea Catchment and near the confluence of the Mangaone Stream with the Manawatū River. During the reporting period planting, willow removal and weed control occurred at various Green Corridors sites along the Turitea Stream, and more riparian planting. Resource consent was recently granted to undertake erosion control remediation in the Turitea Stream, through Green Corridors planting.
  - There are five iwi environmental management plans via the Manawatū FIF project. Two have been completed (Rangitāne o Manawatū and Te Runanga o Raukawa), another is in draft form (Rangitāne Tāmaki Nui a Rua) and the remaining two are in progress. Rangitāne o Manawatū presented their plan to Horizons staff in March 2023. Completion of all five of the iwi management plans is programmed for June 2023, however there is some concern about all plans being delivered in time.
  - Stream Fencing has a target of 50 km per annum, and 250 km over the life of the project. To date 270.75 km have been completed with another 54 km to be completed and claimed prior to the end of June 2023.
  - Riparian planting has a target of 40,000 riparian plants per annum and 200,000 riparian plants over the life of the project. To date 347,377 riparian plants have been planted with another 41,890 to still be planted prior to the end of June 2023.
  - Fish barrier remediation has a target of four per year, and 20 over the life of the project. Twenty have been completed with another four scheduled for completion by the end of June 2023.
  - Community Grants has a target of nine per year and 45 over the life of the project. Forty-two have been completed with another seven scheduled to for completion by the end of June 2023.

# **Regional Freshwater Grants**

10.5. With the Manawatū Freshwater Improvement Fund finishing in June 2023, funding from the targeted rate for the Manawatū Accord will be allocated to complete works in the Manawatū Catchment for stream fencing and riparian planting funded through the Regional Stream Fencing and Riparian Planting programme Jobs for Nature project (see below).



This means that the pool of funding that was previously available for community projects is not available in the 2023-24 financial year.

- 10.6. Council has agreed to fund a Regional Freshwater Community Grant of \$100,000 for the 2023-24 financial year, from the Water Quantity and Quality targeted rate reserves. The fund is to seek applications from across the Horizons region for projects that encourage engagement with the freshwater environment, education of water quality issues, or projects that encourage water quality interventions. The Regional Stream Fencing and Riparian Planting Jobs for Nature Governance Group is proposed to consider and make decisions on these applications after an initial staff assessment. This Governance Group has representatives from a number of partners and stakeholders that are spread across the region and represent various interests.
- 10.7. Applications are to open early May 2023, close 30 June 2023 with decisions on success or otherwise of proposals to be made by the end of July 2023.

## 11. JOBS FOR NATURE - STREAM FENCING AND PLANTING

- 11.1. The Regional Stream Fencing and Riparian Planting project is in the third year of a four-year programme.
- 11.2. During the first three years of the project, the following were achieved and allocated to be completed:
  - Stream Fencing has a target of 105 kms for the 2022-23 financial year, and 405 km over the four-year life of the project. To date the project has completed 171.61km with another 96.79 km to be completed and claimed by the end of June 2023.
  - Riparian planting has a target of 100,000 riparian plants for the 2022-23 financial year, and 375,000 riparian plants over the four-year life of the project. To date 211,313 riparian plants have been planted with 33,063 still be planted prior to the end of June 2023.

# 12. COMMUNITY ENVIRONMENT FUND – WAIKAWA CATCHMENT

- 12.1. The Waikawa Catchment Community Environment Fund project transitioned from being led by Landcare Trust to being Horizons-led in 2021 and as part of this transfer, the project targets were changed to focus on stream fencing and riparian planting within the Waikawa Catchment. This project ceases at the end of June 2023.
- 12.2. During the two years of the project the following have been achieved and allocated to be completed:
  - This financial year, 431 metres of stream fencing has been completed for an annual target of 1,600 metres. Another 1,430 metres is allocated for completion by the end of June 2023. During the two years to date 1,093 metres has been completed against a target 3,200 metres.
  - This financial year, 3,840 riparian plants have been allocated for completion by the end of June 2023. During the two years to date 3,472 riparian plants have been planted, against a target of 6,000.
- 12.3. These totals are included in Table 1 above.



# 13. JOBS FOR NATURE - ENHANCING FISH POPULATIONS THROUGH FISH PASSAGE REMEDIATION

13.1. The Enhancing Fish Populations project through fish passage is in the third year of a four-year project. The programme exceeded its targets in its first three years.

# Stream walking

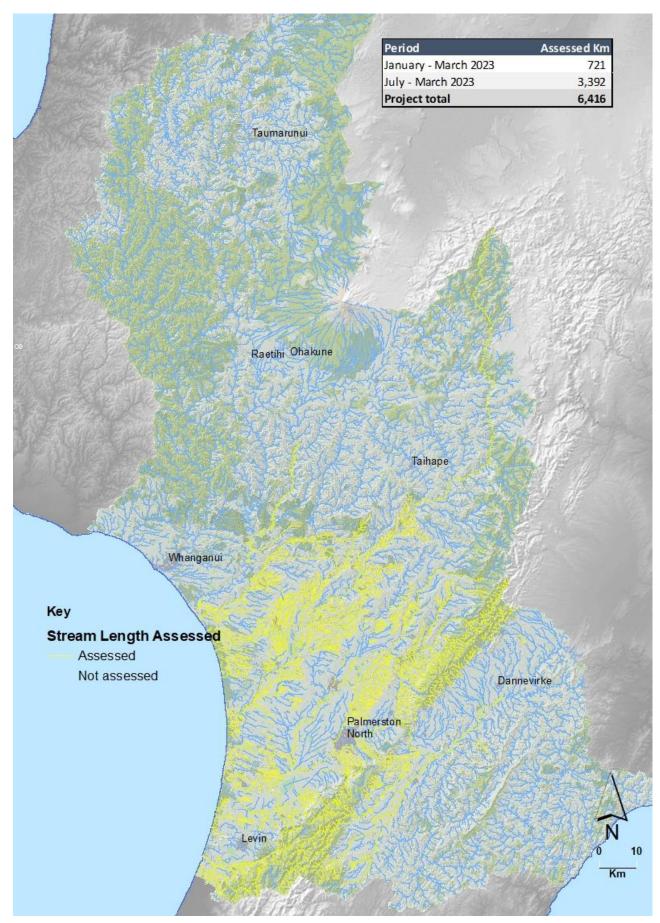
13.2. From January 2023 to March 2023, 721 km of stream length was assessed for in-stream structures and the potential to form barriers to fish passage, totaling 6,416 km over the October 2020-March 2023 life of the project (Map 2). There were 175 structure assessments completed to determine their ability to impede fish passage, totaling 2,702 structure assessments completed over the life of the project against a target of 2,000 (Map 3).

## **Barrier remediation**

13.3. During the year to date 26 barrier remediations have been completed and claimed, against a target of seven. Over the life of the project to date, 40 barriers to fish passage have been remediated against a target of 25 (Map 4).

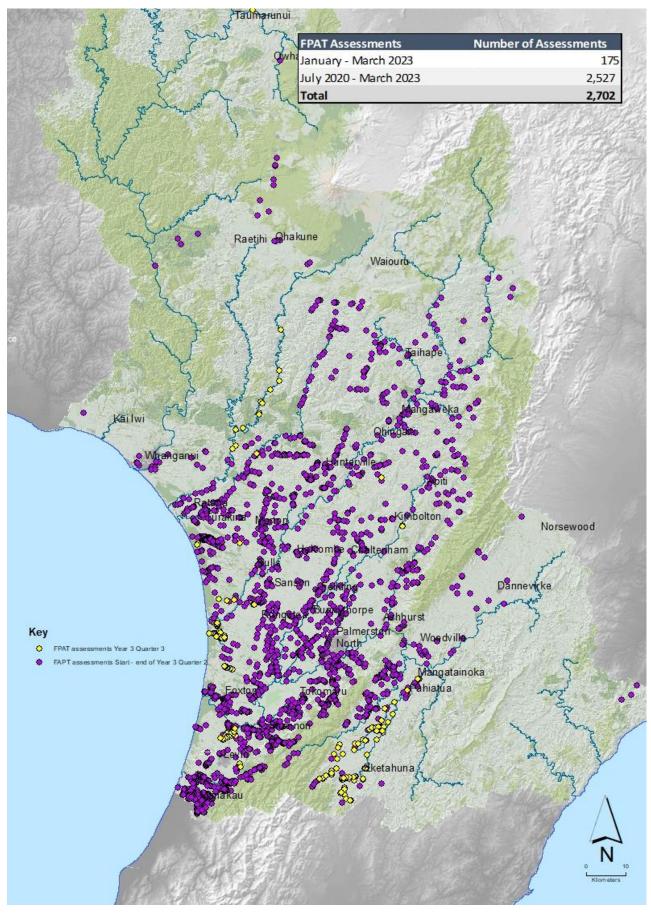
## Monitoring

13.4. The Annual Plan has a target of monitoring at 12 sites across the region and an additional 36 sites were surveyed during the reporting period, taking the total this year to 61 (Map 5). Over the life of the project to date, monitoring has been completed at 212 sites against a target of 48.



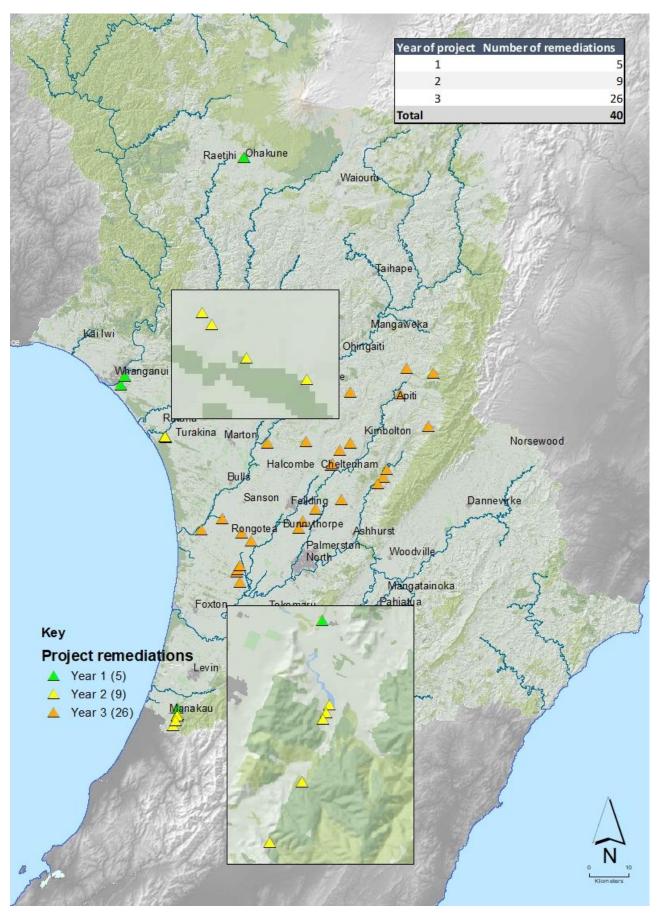
Map 2: Total stream length assessed over the life of the project (October 2020-March 2023).





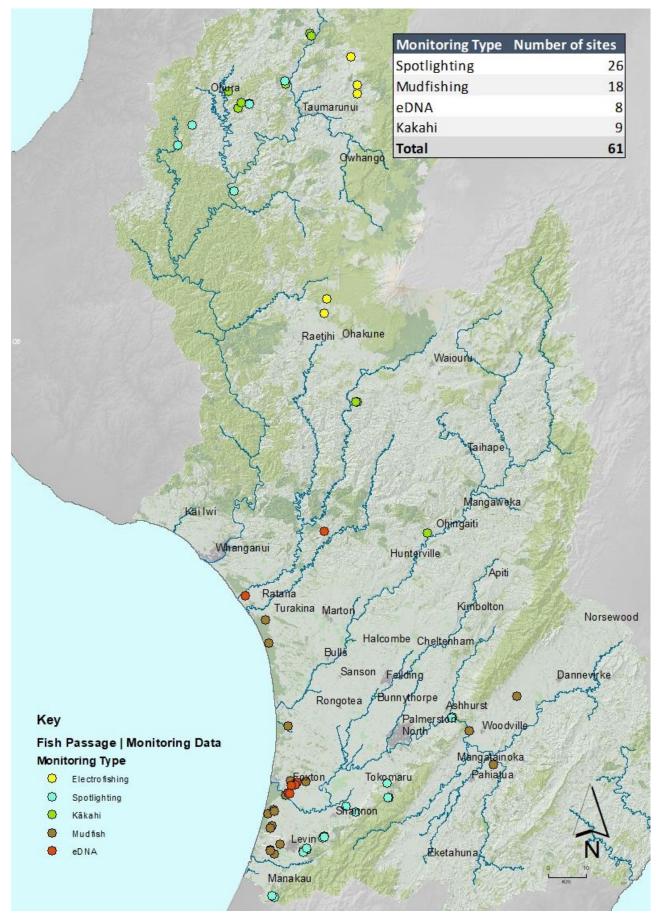
**Map 3:** Total barrier assessments completed over the life of the project (October 2020-March 2023). Those assessed this quarter are in yellow.





**Map 4:** Remediated barriers over the life of the project (October 2020-March 2023). Those claimed in the 2022-23 financial year are in orange.





Map 5: Monitoring sites surveyed to date during year three of the project (2022-23).



## 14. LAKE HOROWHENUA RESTORATION PROJECT INCLUDING JOBS FOR NATURE

14.1. The LTP 2021-31 includes a target to complete an annual report to Council on lake restoration activity, including the Jobs for Nature Fund project for Lake Horowhenua. This update report is the annual report for the 2022-23 financial year.

# Weed harvesting

- 14.2. Lake-weed harvesting was identified in reports on lake restoration options for Lake Horowhenua in 2010 and 2011. The programme history is overviewed in the Council item in September 2021 (Weed harvesting item). This financial year has been the first year of the full operation of the weed harvesting operation after the completion of the trial operation in the 2021-22 financial year.
- 14.3. NIWA undertook a macrophyte survey in October 2022 and updated the operational management plan for weed harvesting, with input from the Lake Horowhenua Trust. The survey found that the rapid spring growth had not yet occurred and the start date for weed harvesting was delayed. Harvesting commenced in December 2022.
- 14.4. Just prior to Christmas 2022 the weed harvesting operation was completed with delivery by Horizons, the Lake Horowhenua Trust and Muaūpoko Tribal Authority. Overall, 43 hectares of weed that was suitable (long enough) for harvesting was harvested. In total, approximately 42 cubic metres of weed was harvested, weighing about 10.6 tonnes.
- 14.5. The delayed growth of the weed meant surface reaching macrophytes appeared in Lake Horowhenua in April 2023. This is not unexpected given that the harvester effectively works as a lawn mower and the weed continues to grow after being cut. Weed mapping was completed in April 2023, although was difficult to complete in some parts of the lake due to the weed density. Another round of weed monitoring will be undertaken in May 2023 to better understand the weed dynamics and any future changes to the weed harvesting operation that might be required. This may mean that in future years, the weed harvesting operation occurs over two rounds in order to prevent the elevated pH levels seen within the lake. These harvesting rounds are likely to be in early summer and mid to late autumn though the timing will need to be aligned with the weed growth within the lake.

## **Horowhenua Freshwater Management Unit Water Quality Interventions**

- 14.6. During the reporting period the Horowhenua FMU Water Quality Interventions Jobs for Nature project progressed across the range of objectives, including a Governance Group Meeting in February that built on the four held in July, September, October and December 2022.
- 14.7. The science component of the project has completed a groundwater report and established new monitoring activity. A nutrient budget for the lake and wider FMU, including the Ōhau and Waikawa catchments, has been completed and is available on Horizons' website at <a href="https://www.horizons.govt.nz/managing-natural-resources/horowhenua-water-quality-interventions#reports">https://www.horizons.govt.nz/managing-natural-resources/horowhenua-water-quality-interventions#reports</a>. Further work has occurred on understanding the shallow groundwater movement across the property purchased for the wetland complex, with the installation of piezometers.
- 14.8. A public web tool has been developed for the Horowhenua FMU project. The page can be found at <a href="https://www.horizons.govt.nz/managing-natural-resources/horowhenua-water-quality-interventions">https://www.horizons.govt.nz/managing-natural-resources/horowhenua-water-quality-interventions</a>.
- 14.9. Hui were held across the Waiophu Freshwater Management Unit during November 2022 to present the concept design for the wetland complex and to outline the Oranga Wai process. Meetings with individual landowners and others continue as requested. The Horowhenua Community Stakeholder Group continues to meet on a regular basis as the project progresses.



- 14.10. During the reporting period the project team submitted an application to MfE to enable the use of the Fast Track legislation for the wetland project. This application, which is being processed, was based on completing Phases 1 and 2 of the master plan. Phase 1, covering at least 15 ha of land, is the only one funded at this stage through Mahi mō te Taiao Jobs for Nature Horowhenua (Waiopehu) Freshwater Management Unit Water Quality Interventions project (2021-24). As further funding opportunities become available, the following two phases will be considered. This design is now entering consent design stage and will incorporate some of the public feedback received from the earlier rounds of community engagement and the ongoing discussions that are held with parties. An information sheet providing answers to frequently asked questions has been developed and has been attached as Annex A.
- 14.11. A hui was held at Kohutaroa Marae in late March 2023 involving the initial meeting of all the technical experts for the project in person and including representatives from Kohutaroa Marae, the Lake Horowhenua Trust and Muaūpoko Tribal Authority. Individual meetings with two surrounding landowners also occurred the day prior with the groundwater expert for the project.
- 14.12. The lease on the property owned by Horizons ends on 1 June 2023 and we have engaged Rural Lifestyle Real Estate to undertake a tender process on our behalf. This is being done through the open market for a new two-year lease arrangement which will involve the removal of the land required for Phase 1 of the wetland during the first year of the lease arrangement.

## **Botulism response**

14.13. In late December 2022, it was discovered that some birds present on the lake were displaying symptoms of botulism similar to that experienced earlier in 2022 on Lake Horowhenua. The response was led by the Lake Horowhenua Trust with Horizons providing support which involved contacting MPI for assistance with confirmation of the cause. MPI staff visited the lake and gathered samples for laboratory analysis which returned positive confirmation that botulism was present in the specimens collected from the lake. The response led by the Lake Trust has involved removal of dead and dying birds from the lake, breaking of the maggot cycle which results in the infection of other birds and some fish species. Information on the 2022 botulism outbreak and response can be found in this 2022 item.

## 15. SIGNIFICANCE

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

Lucy Ferguson Scotty Moore

FRESHWATER COORDINATOR FRESHWATER COORDINATOR

Tessa Stevens Logan Brown

FRESHWATER COORDINATOR FRESHWATER & PARTNERSHIPS MANAGER

Dr Jon Roygard

**GROUP MANAGER NATURAL RESOURCES & PARTNERSHIPS** 

#### **ANNEXES**

A Arawhata Wetland Frequently Asked Questions



#### ARAWHATA WETLAND PROJECT

# Frequently asked questions

# What does the Arawhata Wetland Project (the "Project") involve?

The Project involves construction of a hybrid engineered and restoration focused natural wetland system to the south of Punahau/Lake Horowhenua. The hybrid design involves more natural, and less engineered wetlands closer to the Punahau, and engineered wetlands in the elevated areas of the site. The engineered part of the wetland still appears 'natural' as passive wetlands, but have higher levels of treatment with a similar footprint.

## • Where will the wetland be constructed?

The Project site is located approximately 3km west of the township of Levin, 6km from the sea (Hokio Beach) and between Punahau and Lake Waiwiri. The site is accessed via Hokio Beach Road near the north-east side of the site. The proposed wetland site is currently operating as a 142 ha dairy farm.

# What is the purpose of the Project?

The Project has been designed to enhance the water quality of Punahau through the construction of engineered treatment wetlands and restoration of previously drained natural wetlands in the Arawhata Stream catchment. Presently, Punahau is one of the most degraded lakes in Aotearoa New Zealand. The Project will also enhance the cultural and ecological values of Punahau and its surrounds.

# • Why is the Arawhata Wetland project required?

The water quality of Punahau is very poor. Of the Lake's tributary inflows, the Arawhata Stream contributes the largest amount of nitrogen to Punahau. Concentrations of nitrate in the Arawhata Stream are higher than the drinking water standard and are likely toxic to a range of fish species. The Arawhata Stream's median nitrogen concentration (total oxidised nitrogen) is the second highest in New Zealand and the highest in the region. The Arawhata Stream is also the single largest source of sediment and phosphorous to Punahau. This Project is a continuation of restoration efforts at Punahau, alongside the Horowhenua 11 Part Reservation Trust (the Lake Trust).

## • Who is involved in the Project?

A Governance Group to oversee the project has been established, with representation from Horizons Regional Council, Horowhenua District Council, the Lake Trust, Muaūpoko Tribal Authority, Te Runanga o Raukawa, and Ministry for the Environment.

# • When will construction commence? What does Stage one involve?

It is proposed that the wetland complex will be developed over three stages. Resource consents for the first two stages will be sought in the first instance, with works involved in the third stage to be authorised separately in the future. Construction of the first stage is



presently programmed to commence in 2024. Stage one of the Project involves constructing sediment basins, modifications to existing drainage systems on the site, including removal of some drains and deepening and wider of other drains, in addition with planting of native plants, and modification to the existing sediment downstream of Hōkio Beach Road.

#### How is it funded?

Funding for the project has been provided through the Government's Jobs for Nature programme. Horizons has been contracted by the Ministry for the Environment to deliver the project. Horizons is committing additional funds and 'in-kind' support to the project.

#### What are the benefits? Environmental and otherwise?

The Project will result in an overall net environmental improvement relative to the existing environment, including positive effects on water quality, cultural, and ecosystem health values. The Project will result in substantial nutrient reductions (sediment, nitrogen and phosphorous) in the Arawhata Stream catchment, and in turn within Punahau. Overall ecosystem health will be enhanced through the creation of a new wetland habitat and reduced sediment and nutrient loads within the Lake. It is anticipated that the equivalent of 45 FTEs will be employed in association with the Project over the period ending in mid-2025.

## • How will sediment entering the lake be reduced without it smothering the wetland?

The constructed wetland concept design has a sediment pond where the Arawhata Stream currently enters the wetland site. This will allow the larger sized sediment particles to drop from the water column before entering the wetland complex. This sediment pond will be adequately sized to ensure it has the capacity for higher flow events when large amounts of sediment are released. Although not currently shown on the concept design sediment traps are also planned for the Wheelan and Joblins road drains that enter the property.

# • How effective will the wetland complex be at removing nutrients from the water?

The modelled effectiveness of the wetland complex has indicated substantial reductions in sediment, nitrogen and phosphorus. This modelling has been completed using water quality and quantity data collected from the Arawhata Stream and other relevant waterways on the property. The modelling outputs will be further refined during the next design phase for the wetland, as monitoring data continues to be collected on a daily basis by Horizons.

# • Will the proposed wetland act in a similar way to the current sediment trap?

No, the current sediment trap is in place to remove sediment from the Arawhata Stream in high flow events. The proposed wetland will remove sediment in sediment traps prior to the Arawhata Stream entering the wetland. The main objective of the wetland is to remove nitrogen from the water. The Arawhata Stream has some of the highest nitrogen levels recorded in the Horizons region and this has a detrimental impact on Punahau.



# • What will be done with the land that is not being used in Stage one of the Project?

This land will continued be farmed in some capacity until Stage two and Stage three are completed. From 1 of June 2023 the farm will no longer be a dairy farm. This will reduce the level of nutrients that are leaching from the property. The farm will be limited to a dry stock and a cut and carry farm system.

## • Can the wetland be used for carbon farming?

Stage one of the wetland will not meet the requirements for native carbon farming as the species found in this kind of environment do not grow large (tall) enough. The forest species proposed as part of Stage three could meet the requirements for native carbon farming and this will be considered at the time of construction of Stage three.

# • How will the wetland impact the groundwater level on surrounding properties?

Overall, there are likely to be some hydrological changes to the site and local environs; however, none of those modifications are anticipated to result in more than minor effects. It is anticipated that there will be slower movement of surface water through the site and the temporary storage of flows in wetland areas, with a corresponding reduction in peak flows overall. The groundwater hydrology is also proposed to be modified including minor drawdown effects where groundwater is collected; however, those effects are not anticipated to be extensive in spatial or volumetric terms. Furthermore, the wetland complex can be designed to ensure no increases in flows arise as a result of the proposal. Any residual water quantity effects arising as a result of the proposal are able to be managed via consent conditions. Further modelling is proposed as part of the planning for detailed design and assessment. This will consider high surface water flows, rainfall and groundwater flows, and will inform any avoidance, mitigation, and remediation measures as necessary. Horizons is committed to working with local landowners to improve the current drainage issues in the area. Horizons is undertaking some drainage maintenance work as a part of the Hōkio Drainage Scheme and will continue to work with local landowners on the drainage issues.

# • How is the ongoing maintenance of the wetland going to be paid for?

Costings for on-going operation and maintenance will be refined once detailed design is undertaken. The refined costings to enable ongoing maintenance will be factored into the implementation program.

# • Will there be public access through the wetland? Will there be a pathway?

There has been general support of a trail between Lake Horowhenua and Lake Waiwiri. The concept proposal has incorporated a walkway into Stage three of the design.

# • What species of plant will be planted in the wetland and where are the plants being sourced from?

Plants will be eco-sourced and the final selection of species will be decided with iwi input. Preference is for species that were historically found across the Project site, in surrounding areas like Arawhata bush block and Waiwiri Reserve, and within the ecological district. The plants will need to be sourced from a range of native plant



nurseries in the Horowhenua area due to the number of plants that will be needed over the life of the Project.



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| Information Only - No Decision Required |       |  |

# PRESENTATION FROM NZ FARM ENVIRONMENT TRUST

#### 1. PRESENTATION

- 1.1 Sarah Harris (Chief Executive) and Terry Olsen (Trustee and Local Committee Chair) will make a presentation to the Integrated Catchment Committee on this year's awards programme and future plans.
- 1.2 The New Zealand Farm Environment Trust (NZFET) facilitates the Ballance Farm Environment Awards (BFEA) programme throughout New Zealand. The Trust is made up of up to eight trustees who set the overall direction of the programme. Trustees include representation from Regional Councils with a land manager appointed by the Regional Chief Executives. David Boone of Greater Wellington currently holds this position.
- 1.3 At a regional level a local committee is responsible for overseeing the Horizons awards programme. The committee manages the local entries, judging, awards showcase and winners' field day.
- 1.4 The key contacts within the Horizons regions are: Terry Olsen Chair, Nadine Olsen Regional Coordinator and Mary Hopkins Regional Judging Coordinator.
- 1.5 Horizons has been involved as a partner since 2004. We provide funding through the Land Management Industry Partnership activity in the LTP. This funding runs the local programme. Grant Cooper represents Horizons on the local committee and other staff are involved in judging or presenting at field days. This year staff from Land, Freshwater and Rural Advice assisted with judging and staff from the Biodiversity team spoke at the field day.
- 1.6 The annual contribution was \$26,000 + GST in 2022-23. There is an additional staff time component.
- 1.7 The judging programme involves two rounds of on farm judging with the judging teams made up from representatives from Horizons, Industry and farmers. All entrants receive a comprehensive feedback report and many comment favourably on both the judging process and the quality and usefulness of the reports.
- 1.8 An awards evening is traditionally held on the Thursday of the Central Districts Field Days. This event usually attracts in excess of two hundred attendees with the sponsors awards made in various categories. This includes the Horizons award for "integration of trees on farm".
- 1.9 The annual programme concludes with the holding of a field day at the regional winners' property. This is a chance to showcase the environmental works being carried out on the property.
- 1.10 The regional winners then go forward to the National Showcase event where a national winner is announced. This is generally carried out in June, completing the annual programme.



## 2. RECOMMENDATION

That the Committee recommends that Council:

a. receives the presentation from New Zealand Farm Environment Trust on the Balance Farm Environment Awards.

# 3. SIGNIFICANCE

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

**Grant Cooper** 

LAND AND PARTNERSHIPS MANAGER

Jon Roygard

**GROUP MANAGER CATCHMENT OPERATIONS** 

#### **ANNEXES**

There are no attachments for this report.



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| Information Only - No Decision Required |       |

# TARARUA DISTRICT COUNCIL - CYCLONE GABRIELLE RECOVERY

## 1. PRESENTATION

- 1.1. Cyclone Gabrielle has had a significant impact on areas of the Manawatū-Whanganui Region, particularly in the Tararua District.
- 1.2. Tararua District was part of the National State of Emergency declared in response to Cyclone Gabrielle on 14 February 2023, moving out of the State of Emergency on 3 March 2023 and into the transition to recovery phase. Further information on Tararua's recovery programme is available via Tararua District Council's website.
- 1.3. Mayor Tracey Collis and representatives of Tararua District Council will provide an update on Cyclone Gabrielle recovery in the Tararua District.
- 1.4. Horizons Regional Council continues to support Tararua's recovery programme. This includes work through Horizons' role as part of the Manawatū-Whanganui Regional Civil Defence Emergency Management Group and the ongoing implementation of its work programmes, including River Management and Land Management activity. Horizons' Recovery Team and the Tararua District Recovery Team are in regular contact and Grant Cooper has been seconded part-time to Tararua District Council as part of the Recovery Team.

# 2. RECOMMENDATION

That the Committee recommends that Council:

a. receives the presentation from Tararua District Council.

## 3. SIGNIFICANCE

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

Dr Jon Roygard

# **GROUP MANAGER CATCHMENT OPERATIONS**

#### **ANNEXES**

There are no attachments for this report.