HAWKE'S BAY
REGIONAL COUNCIL
TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

Meeting of the Environment and Integrated Catchments Committee

Date: 12 June 2024

Time: 9.00am

Venue: Council Chamber
Hawke's Bay Regional Council
159 Dalton Street
NAPIER

Agenda

Hawke's Bay Regional Council

Environment and Integrated Catchments Committee

12 June 2024

Subject: Public Forum

Reason for report

1. This item provides the means for the Committee to give members of the public the opportunity to address the Committee on matters within its terms of reference (attached).

Background

2. The Hawke's Bay Regional Council's Standing Orders provide for public forums as follows:

14. Public Forums

Public forums are a defined period of time, usually at the start of a meeting, which, at the discretion of a meeting, is put aside for the purpose of public input. Public forums are designed to enable members of the public to bring matters to the attention of the local authority.

In the case of a committee or sub-committee, any issue, idea or matter raised in a public forum must also fall within the terms of reference of that meeting.

Requests must be made to the HBRC Governance Team (06 8359200 or governanceteam@hbrc.govt.nz) at least one clear day before the meeting; however, this requirement may be waived by the Chairperson.

14.1 Time limits

A period of up to 30 minutes, or such longer time as the meeting may determine, will be available for the public forum at each scheduled Regional Council, Corporate & Strategic Committee, Environment & Integrated Catchments Committee and Regional Transport Committee meeting.

Speakers can speak for up to 5 minutes. No more than two speakers can speak on behalf of an organisation during a public forum. Where the number of speakers presenting in the public forum exceeds 6 in total, the Chairperson has discretion to restrict the speaking time permitted for all presenters.

14.2 Restrictions

The Chairperson has the discretion to decline to hear a speaker or to terminate a presentation at any time where:

- a speaker is repeating views presented by an earlier speaker at the same public forum
- the speaker is criticising elected members and/or staff
- the speaker is being repetitious, disrespectful or offensive
- the speaker has previously spoken on the same issue
- the matter is subject to legal proceedings
- the matter is subject to a hearing, including the hearing of submissions where the local authority or committee sits in a quasi-judicial capacity.

14.3 Questions at public forums

At the conclusion of the presentation, with the permission of the Chairperson, elected members may ask questions of speakers. Questions are to be confined to obtaining information or clarification on matters raised by a speaker.

14.4 No resolutions

Following the public forum no debate or decisions will be made at the meeting on issues raised during the forum unless related to items already on the agenda.

Decision-making process

3. Staff have assessed the requirements of the Local Government Act 2002 in relation to this item and have concluded that, as this report is for information only, the decision-making provisions do not apply.

Recommendation

That the Environment and Integrated Catchments Committee receives and notes the *Public Forum speakers' verbal presentations*.

Authored by:

Leeanne Hooper
Team Leader Governance

Approved by:

Desiree Cull
Strategy and Governance Manager

Attachment/s

1⇩ Environment & Integrated Catchments Committee Terms of Reference

Environment and Integrated Catchments Committee

Terms of Reference

Adopted by resolution of Hawke's Bay Regional Council on 16 November 2022

The purpose of the Environment and Integrated Catchments Committee (EICC) is to consider and recommend to Council:

1. Policy

1.1 carbon reduction and climate change adaptation and mitigation policies and strategies developed to guide the establishment of work plans

1.2 policies with regard to Council responsibilities and involvement in flood protection and drainage

1.3 policies with regard to Council's responsibilities for biosecurity, biodiversity and pest management

1.4 policies, strategies, and by-laws and compliance and enforcement programs relating to maritime and navigational safety under the Maritime Transport Act.

2. Environmental Monitoring and Research

2.1 environmental monitoring strategies and research and investigation programmes, including the State of the Environment Reports.

2.2 technical reports on the findings of research and investigations into the impact of activities on the receiving environments and recommend to Council the development of new policy frameworks based around such information.

3. Implementation

3.1 management plans or any similar such documents for the effective implementation of environmental enhancement and improvement programmes of Council.

3.2 all other policy implementation issues of Council.

3.3 To periodically review the effectiveness of Council's non-regulatory resource management operational work programmes within the ambit of the Committee and make recommendations to Council for any changes.

3.4 To assist staff, where appropriate, in identifying a preferred option and/or funding mechanism for Council consideration of biosecurity/ biodiversity initiatives, proposals for new or expansion of existing open spaces and regional parks, and infrastructure asset construction or improvement work; and in promoting the preferred option to the beneficiaries/ community.

4. Financial Authority

4.1 consideration of possible financial implications of specific initiatives.

5. Use of Delegated Powers for the Environment & Integrated Catchments Committee

5.1 This Committee may, without confirmation by the local authority that made the delegations, exercise or perform them in the like manner and with the same effect as the local authority could itself have exercised or performed them, provided that the decision deserves urgency and the decision to make the resolution a decision of Council is carried unanimously.

Members:	• All Councillors being: Hinewai Ormsby, Will Foley, Neil Kirton, Charles Lambert, Jerf van Beek, Martin Williams, Sophie Siers, Di Roadley, Thompson Hokianga, Jock Mackintosh • One appointed member of the Māori Committee, Katarina Kawana • One appointed member of the Regional Planning Committee, Michelle McIlroy
Chair:	A member of the Committee as elected by the Council being: councillor Sophie Siers
Deputy Chair:	A member of the Committee as elected by the Council being: councillor Di Roadley
Meeting Frequency:	Quarterly
Staff Executive:	Group Manager Integrated Catchment Management Group Manager Asset Management

Hawke's Bay Regional Council

Environment and Integrated Catchments Committee

12 June 2024

Subject: Braided Rivers Research Project Results

Reason for report

1. This report provides a summary of the information to be presented by Lincoln Agritech on their braided rivers recharge research. It includes:

    1.1. an overview of the research programme, including revisiting the objectives and outcomes sought, timeframes, budgets and partners involved.

    1.2. an update on the data collected, analysis undertaken, and findings.

Executive summary

2. The Braided Rivers Research Project is a five-year initiative (2019-2024) funded by MBIE and aimed at understanding the amount of water exchanged between braided river systems and underlying groundwater resources.

3. The research investigates how braided river systems are connected to alluvial aquifers and how changes in braided rivers (bed elevation and width) affect leakage rates. This research helps to inform river management practices and environmental limits. This knowledge will enable river managers and decision-makers to understand the effect that different river engineering interventions have on groundwater recharge and enable rivers to be managed more holistically.

4. The study assesses the cost-benefit of various river management scenarios, such as wider rivers (room for rivers) to assess the feasibility of alternative river management strategies.

Strategic fit

5. This work underpins actions and outcomes listed in the 2020-2025 Strategic Plan as things that the council will continue to do; and will do differently:

    5.1. **Water** – The research by Lincoln Agritech has found that hydrologic functioning can be improved if rivers can be managed as a whole system. Rivers have traditionally been managed primarily for flood protection, and this has been at the expense of groundwater recharge, and potentially low-flow resilience (a proposed future research direction).

    5.2. **Land** - Managing rivers in a way that optimises the annual water balance, the river flows and groundwater recharge will provide resilience to climate variability and change.

    5.3. **Biodiversity** – The widening of river corridors not only improves hydrological function but also biodiversity.

    5.4. **Infrastructure and Services** – Much of the infrastructure for climate resilience is already in place (rivers and aquifers). HBRC has an opportunity to optimise existing natural infrastructure by simply changing river management.

Background

6. This research was driven by the need to better understand the interaction between braided rivers and groundwater resources. This gap in understanding was identified while investigating long-term declines in groundwater levels in the Wairau Aquifer (Wohling 2018). The declines could not be explained by the usual causes (pumping, changes in ERT, increased drainage) which led to structural changes in the river being identified as the likely cause (Wohling et al.

2020). However, information on the interaction between braided river and aquifer settings was scarce which prompted a research proposal being submitted to the MBIE Endeavour Fund. HBRC has been involved from the start (initiated by a council hydrologist who has since left us).

What is the budget?

7. In 2019, Lincoln Agritech Ltd was awarded ~$8m in MBIE funding aimed at understanding the amount of water exchanged between braided river systems and underlying groundwater resources. Hawke's Bay Regional Council has provided a cash contribution of $50,000 in 2020-21 and an in-kind contribution in the form of access to existing models, access to SkyTEM data, gauging support, and staff participation in workshops and advisory groups.

Who's involved?

8. The project includes experts from Lincoln Agritech Ltd, as well as NIWA, Lincoln University and its Agribusiness and Economics Research Unit (AERU), University of Canterbury, Waterways Centre for Freshwater Management, Flinders University (Australia), Technische Universität Dresden (Germany), and Aarhus University (Denmark).

What's being collected and where?

9. The team has used novel approaches to characterise river losses, hyporheic exchange and parafluvial flow. Techniques include fibre optics for temperature sensing, geophysical techniques to measure ground resistivity, river bathymetry, thermal imagery, isotope analysis (radon) and advanced 3D hydrological modelling.

10. The research focuses on three case-study rivers 1) Ngaruroro River (partners HBRC, Ngāti Kahungunu); 2) Selwyn/Wakirikiri River in Canterbury (partners Te Taumutu Rūnaka, ECan); and 3) Wairau River in Marlborough (partner MDC).

Discussion

11. Rivers along the east coast of New Zealand, are gravel-bedded rivers with multiple channels that are within a corridor, but the beds are constantly realigning and shifting depending on the flows and conditions.

12. Much of the work focused on understanding sediment structure beneath the three study rivers. The gravels associated with braided rivers form some of the most permeable aquifers in the world, which poses the question of why these types of rivers don't all dry up in the summer (some do, such as the Selwyn). We suspected that there must be a structural control on leakage from the river system, some kind of impedance layer which controls the rate of leakage.

13. Our field investigations, including coring, sediment analysis, and various geophysical methods, revealed that the active braidplain gravels in all three braided rivers are very loose, unlike the more compact, silt- and clay-rich surrounding and underlying deposits, which impede river leakage. The high porosity and permeability of these gravels, formed by sediment mobilisation during floods, create a "braidplain aquifer" integral to the river's functioning (Wilson et al. 2024).

14. We consider a braided river to be a "river system", consisting of the visible channels and underlying reservoir (braidplain aquifer). Healthy river function and groundwater recharge rates both depend on the integrity of this gravel reservoir. We think the implications for HBRC are:

    14.1. Gravel extraction can lower the net riverbed elevation, reducing the up-gradient aquifer boundary and aquifer storage. This also decreases groundwater recharge rates due to a lowered hydraulic gradient and reduced aquifer transmissivity.

    14.2. Narrowing the active river corridor decreases the wetted footprint (width) of the braidplain aquifer. This can decrease groundwater recharge in settings where the river system is perched above the regional water table. Based on Williams (1987), the

narrowing of the river between Roy's Hill and Fernhill was carried out in 1983-1984. The Substation groundwater level record shows a drop in water elevations which coincides with the timing of this narrowing.

14.3. Scouring along the active braidplain margins can drain the braidplain aquifer during low flow periods, altering the river stage-flow relationship and increasing seasonal groundwater level fluctuations. This effect is pronounced in the Wairau River, narrowed by engineering. The hard engineering has led to accelerated scouring, transforming the river from a braided system to a single channel with a central gravel mound and deeply scoured margins, which drain the aquifer during flow recession.

14.4. River narrowing and excessive gravel extraction also have the potential to adversely affect the river's functioning during low flow. We have not specifically studied the influence of the braidplain reservoir geometry and river morphology on river flow and temperature in this study but intend to do so in a future research programme.

15. We have identified that groundwater recharge in the main recharge reach of the Ngaruroro River has been compromised due to the river engineering practices philosophy in New Zealand during the 1950s-60s, coupled with a recent increase in demand for river gravel. Our research also indicates that river recharge functions can be restored and even enhanced with revised river management practices. This issue is not confined to the Ngaruroro River; it also affects rivers in other regions of New Zealand.

16. A model of the river and adjacent groundwater system has been developed to quantify their interaction. Scenarios from a previous workshop were implemented in this calibrated model to assess the impact of changes in river elevation and width on recharge and groundwater levels. The simulation showed that restoring the river to its pre-engineered width and elevation could reverse the long-term decline in groundwater levels observed in the recharge sector of the aquifer.

17. The river elevation and widening scenarios were used together with additional data derived from public surveys as a basis for market and non-market valuations. The results of this analysis are detailed in a report by AERU economists. The findings of this report are that continued riverbed decline has negative environmental and economic outcomes. Ngaruroro bed-raising scenarios have a small overall market costs (no accounting for retaining the value of security of supply for irrigators), but larger non-market benefits. Moderate river widening scenarios are expected to have overall economic benefits.

Next steps

18. A workshop will be held at HBRC on 2 July to enable staff to ask questions about our work, findings, and implications. The workshop will be attended by the key researchers involved in this work from LAL, NIWA, and AERU. This workshop will conclude the Ngaruroro component of our research programme which finishes in September 2024.

19. Over the next few months, we will be working with Marlborough District Council (Andy White, Peter Davidson, Pere Hawes) to incorporate our findings into a review of the Wairau River scheme. MDCs intention is to stabilise the long-term decline in Wairau Aquifer groundwater levels so that a workable water management policy can be applied.

20. Two reports will be circulated after the presentation, being:

20.1. Summary of work and findings for Subsurface Processes in Braided Rivers Research Programme: Ngaruroro Recharge Reach, by LAL and NIWA

20.2. Economic valuation of braided river management, by AERU.

Decision-making process

21. Staff have assessed the requirements of the Local Government Act 2002 concerning this item and have concluded that, as this report is for information only, the decision-making provisions do not apply.

Recommendation

That the Environment and Integrated Catchments Committee receives and notes the *Braided Rivers Research Project Results* report and presentation.

Authored by:

Simon Harper
Team Leader Hydrology & Groundwater Science

Scott Wilson
Hydrogeologist
Lincoln Agritech

Sam French
Acting Manager Science

Approved by:

Iain Maxwell
Group Manager Integrated Catchment Management

Attachment/s

There are no attachments for this report.

Hawke's Bay Regional Council

Environment and Integrated Catchments Committee

12 June 2024

Subject: Land for Life update

Reason for report

1. This item provides the Environment and Integrated Catchments Committee (EICC) with a brief update on the Land for Life (LfL) project, including:
    1.1. the executive summary of the business case for Stage 2
    1.2. progress with Stage 3: validating the ability to scale
    1.3. progress with securing funding for Stage 3 and associated activity to build project momentum.

Executive summary

2. Editing and formatting of the business case for Stage 2 has been completed and it is in the process of being circulated to project partners under a non-disclosure agreement.
3. A project plan for Stage 3 has been developed. This stage aims to validate the ability to scale the LfL model in the Hawke's Bay region and nationally. The project plan identifies project workstreams and milestones.
4. Stage 3 is estimated to cost $3.38M over two years. Funding is still being secured but aims to be split between in-kind contributions from HBRC and cash from MPI through an application to the Sustainable Future Farming Fund (SFFF), The Nature Conservancy (TNC), philanthropic donors and corporate partners.
5. Non-binding preparatory work has begun on Stage 3 and a programme of communications and engagement is underway to support growing the momentum with the project. This includes invitations to ministers to visit the region.

Strategic fit

6. As outlined in the March 2024 update to the Committee, Stage 3 of the project aims to validate that the approach can be scaled across Hawke's Bay and to other regions. The planning for the next stage is underway. A project plan has been developed and funding is being secured along with associated approvals to proceed. The project purpose, goal and objectives of Stage 3 are outlined below.
7. Project purpose – To validate the ability to scale the LfL model in the Hawke's Bay region and nationally.
8. Project goal – Nurture thriving communities and nature by preserving and enhancing the productive link between people and the land.
9. Project objectives:
    9.1. Stand up and further develop the LfL model to enable implementation at scale
    9.2. Secure the skills, expertise, influence and commitment of critical partners and opinion leaders
    9.3. Validate ability to scale the LfL model through implementation across the initial 12 pilot farms and an additional 90 farms across the Hawke's Bay region

9.4. Formalise the pipeline of landowners (the balance of 600 farms) to participate in the programme in the Hawke's Bay region

9.5. Pursue opportunities to drive additional gains for nature, including to strengthen incentives for native planting

9.6. Assess opportunities to scale the LfL model to other suitable regions and strengthen conditions for scaling.

Background: business case for stage 2

10. The LfL business case was compiled in mid-2023. The compilation process was supported with solid market sounding with potential financial, implementation and supply chain partners. The draft document underwent a quality assessment process involving some 25 subject matter experts across key agencies associated with the project.

11. The business case was presented to council committee meetings and workshops in May, July and August 2023. The final draft was submitted for consultation to project partners, TNC and MPI in August. Feedback from this consultation was that the business case needed to better demonstrate that the LfL model will result in broader outcomes for nature to satisfy TNC financial donors and demonstrate the environmental outcomes sought by HBRC.

12. Wildlands and Cawthron were commissioned to work with the project team and HBRC science and biodiversity teams to complete a LfL technical paper on the gains for nature achieved by the project. The findings from the technical paper along with feedback were the basis for updating the business case. The steering group also asked the project team to include the aspirational policy settings and incentives needed to achieve satisfactory increases in benefits for nature.

13. The updated business case strengthens the case that accelerating the roll out of LfL accelerates realisation of benefits at scale. With the stretched planting goals, the outcomes achieved by implementing LfL across 300 farms with Comprehensive LfL Farm Plans and their catchments were outlined in the March 2024 EICC meeting paper.

14. The steering group, comprising HBRC, TNC and MPI signed off the business case in December 2023, completing Stage 2 of the project. Final editing and publishing of the business case has been completed. It remains commercial in confidence as the project moves to commercial discussions and is being circulated to prospective project partners under non-disclosure agreement. The executive summary is attached to this report: **Land for Life business case executive summary**. The full business case is available to councillors on request.

Discussion

15. Funding for the next stage totals $3.38M over the two and a half years to June 2026 as summarised in the March EICC paper. The envisaged breakdown in funding comprises:

15.1. HBRC – $240,000 in funding from the current 2023-24 financial year LfL budget and $1.11M in-kind contribution 2024-25 and 2025-26 financial years

15.2. TNC/philanthropic and corporate donors – $800,000 in cash for the two financial years 2024-25 and 2025-26

15.3. MPI – $995,000 in cash has been applied for from the SFFF, which is currently being considered by the investment committee.

16. Letters of co-funding commitment are required by the SFFF process. TNC has provided a letter pledging $400,000, half of what is required from philanthropic and corporate sector donors but enough to progress a year into the two-year Stage 3 project. HBRC's letter of funding commitment will underwrite the $400,000 difference in private sector funding, building time to secure the additional funding required. If the full value of additional private sector funding is not secured, HBRC will reappropriate funding from the existing integrated catchment

management budget to cover the shortfall. This will be cost neutral to council.

17. To support the applications of funding and preparation for Stage 3, a programme of communications and engagement is underway to assist building project momentum and to keep the farming community and project partners informed. As part of this, letters of invitation to visit on-farm in Hawke's Bay have been sent to ministers McClay and Hoggard, and separately to Minister Watts. Minister Hoggard's office is liaising with us about planning a visit on-farm for 5 July 2024. The briefing note developed for the visit is attached: **LfL briefing note on Stage 3 launch**.

18. Non-binding preparatory work has begun on Stage 3. Initial tasks will be to develop a terms of reference for governance arrangements, onboarding financial implementation partners and confirm the LfL vision and strategy with key partners and stakeholders through engagement.

19. The funding required to implement LfL on-farm over the 10-year period horizon in the business case is $96M under a self-funded model that brings in private sector funding (not funding from HBRC). The resourcing required to leverage this investment and realise implementation over this 10-year period is $16.5M. The $3.38M for Phase 3 covers the first two years of this 10-year period in order to validate the ability to scale and identify funding sources to continue scaling LfL across the Hawke's Bay region.

20. As outlined in the March EICC paper, the main steps in the forward work programme are summarised as follows with go/no go decision milestones to be added:

Activity/Event	*Date for completion*
LfL vision & strategy (with key partner & stakeholder engagement/buy-in)	30 June 2024
Process and procurement plan agreed for selection of key partners (eg, financing and implementing entities)	30 June 2024
Key partners onboard	31 August 2024
Measurement Reporting and Verification Programme Design and Plan	31 August 2024
Spatial farm planning and reporting tool in place	31 October 2024
Extension Programme Design and Plan	31 November 2024
Detailed design report(s) (including design of Technical assistance facility; financing entity, deal and package available to farmers; implementation arrangements)	12 December 2024
Stand up the Land for Life model (agreements in place and operationalise the relevant entities)	31 March 2025
RD&I Plan	30 June 2025
Catchment strategy model and 2x strategies confirmed with catchment groups	31 April 2026
Lessons learned report	28 Feb 2026
Report on assessment of national scaling opportunities (including suitability of regions and conditions to enable scaling)	28 Feb 2026
Decision paper: Approval to move to Stage 4 and associated funding	31 May 2026
12 farm plans for initial pilot farms operationalised (trees in the ground, practice improvements etc.)	30 June 2026
90 Comprehensive LfL Farm Plans delivered	30 June 2026
Balance of 600 farms/farmers identified (ie. to onboard after 2 years)	30 June 2026

21. Council can expect to receive the next update after funding for the project has been secured.

Decision-making process

22. Staff have assessed the requirements of the Local Government Act 2002 in relation to this item and have concluded that, as this report is for information only, the decision-making provisions do not apply.

Recommendation

That the Environment and Integrated Catchment Committee receives and notes the *Land for Life update* staff report.

Authored by:

Michael Bassett-Foss
Land for Life Project Manager

Approved by:

Iain Maxwell
Group Manager Integrated Catchment Management

Attachment/s

1	Land for Life business case Executive Summary	Under Separate Cover
2⇩	Land for Life briefing note on stage 3 launch	

Land for Life briefing note for ministerial discussion – phase 3 launch

8 May 2024

What is the Land for Life (LfL) model?

LfL is a public-private partnership (PPP) model that supports a shift to resilient land production systems.

Its goal is to nurture thriving communities and nature by preserving and enhancing the productive link between people and the land.

It addresses significant challenges relating to erosion, climate change adaption and mitigation, freshwater protection, restoring biodiversity, and building resilience into our land production systems.

LfL is a collaboration between the Ministry for Primary Industries (MPI), Hawke's Bay Regional Council (HBRC) and The Nature Conservancy Aotearoa New Zealand (TNC). It helps farmers reduce erosion on their farms at the scale that is urgently needed and adopt more regenerative, resilient and profitable farming systems and communities.

LfL partners with landowners to plant the right trees in the right places and protect existing native forest and wetland remnants, and support improvements in pastoral farm systems, through best practice and regenerative farming models.

The model includes:

- Financing to fund on-farm interventions through a "green financing" mechanism
- Implementation support options (e.g., planting trees)
- An assistance programme, which enables the investment and interventions (e.g., research, monitoring and verification, and catchment, farm planning and extension support).

How the Land for Life model was formed and why the next stage is "validate ability to scale"

The model is the culmination of two prior stages:

- *Stage 1 (Foundation research):* This entailed extensive MPI (Te Uru Rākau)/HBRC-funded research covering a range of forest and management systems producing spatial layers like vulnerability to erosion. A case study involving a detailed farm/forestry plan on a farm in northern Hawke's Bay was completed along with a range of technical reports ready for publication.
- *Stage 2 (Business Case and Pilot):* This entailed design of a farm planning process, proof-of-concept piloting it across 12 farms, market testing and exploring potential barriers and solutions. It produced a formal business case that was approved, by MPI, TNC and HBRC in December 2023. The business case evaluates financing and implementation options, including findings from extensive market testing. Planting and other interventions are underway on several farms.

Stage 3: Validating ability to scale the LfL model

Phase 3 includes standing up and implementing the LfL model at the scale of 90 farms in the Hawke's Bay region to validate ability to scale, and formally assesses national scaling opportunities. The intent is to transition to a sustainable financing model after Stage 3 where the LfL model is self-funding as it is scaled nationally.

Project purpose: validate ability to scale the LfL model across suitable regions in New Zealand.

The **Project objectives** are:

a. Stand up the LfL model to enable implementation at scale

b. Secure the skills, expertise, influence and commitment of critical partners

c. Validate ability to scale through implementation across the initial 12 pilot farms and an additional 90 farms across the region

d. Formalise the pipeline of landowners (balance of 600 farms)

e. Pursue opportunities to drive additional gains and protections for nature

f. Assess opportunities to scale the LfL model to other regions

Stage 3 has a project plan spanning two-years and costing $3.38M with funding yet to secured from:

- $995,000 cash from MPI through a Sustainable Futures Farming Fund application
- $1,275,000 cash from TNC philanthropic donors, HBRC and landowner contributions
- $1,110,000 of in-kind support through HBRC resources

MPI's representative on the project steering group has been Alex Wilson, Director, Forestry Engagement and Advice, Forestry New Zealand/TUR, MPI.

Why is government funding needed?

- National public co-funding is appropriate, as the project has the potential to generate significant public benefits across New Zealand from increased climate change mitigation and adaptation, enhanced terrestrial, freshwater and marine biosecurity and better hazard mitigation.
- The project can make significant progress towards meeting the Government's targets for reduced net greenhouse gas emissions and towards commitment under the COP28 UAE Declaration on Sustainable Agriculture, Resilient Food Systems, and Climate Action.
- TNC and HBRC are unable to fund the whole project and Government funding is needed to accelerate and de-risk the project – to complete building and validating a model that can be scaled nationally.

  [Note that HBRC's financial position post-cyclone Gabrielle does not allow for this, and that TNC is a not-for-profit that does not fund projects directly but fundraises and is able to direct some philanthropic co-funding as indicated. Philanthropists will contribute to catalyse public benefit alongside public funding]
- LfL establishes a PPP model, with central government funding alongside Council and philanthropic funding in the next stage to catalysing private investment by farmers (via a green financing mechanism).
- If government funding is not available traditional funding models and schemes to address erosion issues will not address the scale of the erosion and climate challenges that New Zealand's pastoral sector faces.

International studies have shown that investment in planting appropriate species on highly erodible land helps avoid future downstream costs, including impacts on safety, infrastructure, homes, possessions and livelihoods, and reducing flood risk. Each dollar invested saves $7 in post-flood recovery costs, refer FEMA Fact Sheet: Natural Hazard Mitigation Saves Interim Report and NIBS Factsheet: Mitigation Saves: For Riverine Flood Mitigation, Federal.

Additional background on the Land for Life initiative – appended to invite letter to ministers

Cyclone Gabrielle brought into stark reality that climate change, erosion and land management is not just a farmer issue and water quality problem. It is a community concern. The sediment ruined large areas of productive land, destroyed a massive amount of horticulture investment, and contributed to taking out road/rail/flood control/water/electricity and communications infrastructure. Silt entered our living rooms

and left large numbers of our communities homeless. Lives were lost. The soil that was lost from our hill country farms and resulting loss in productivity will impact our regional economy for decades to come.

If planting trees on vulnerable land is a known tool to improve carbon sequestration, land management and keep soil on our land where it should be, then why aren't the current tools and solutions working? There are challenges for our landowners: prohibitive financing mechanisms, pushback on regulations, lack of confidence and knowledge, lack of access to resources, misguided carbon incentives and sub-optimal technology use. The current model is not working as it needs to.

Land for Life seeks to fix the model and address significant challenges relating to erosion, climate change adaption and mitigation, freshwater protection, and restoring biodiversity, and to build resilience in our hill country farming. It is a public-private partnership designed to support a shift to resilient land production systems, which provides the tools, expertise and capital needed for farmers to meet environmental and regulatory demands, while preserving productivity and business performance.

Land for Life partners with landowners on two principal interventions:

- Supporting farmers to plant the right trees in the right places and protect existing native forest and wetland remnants, to reduce erosion, improve freshwater quality, improve biodiversity and build resilient farms; and
- Supporting improvements in pastoral farm systems, through best practice and regenerative farming models that are good for farmers' bottom lines and the environment.

It has been initially piloted on 12 Hawke's Bay farms. This work underpinned a business case that was approved by HBRC, MPI and TNC NZ in late 2023. The business case describes the steps needed to scale Land for Life to 600 farms in the Hawke's Bay region, and to assess further potential to scale the model across other regions with similar hill country erosion challenges to truly achieve the scale needed to contribute meaningfully to climate change mitigation (including but not limited to Northland, Gisborne/Tairāwhiti, Manawatu-Whanganui, Wellington/Wairarapa and Tasman).

Benefits include:

- More resilient farming businesses, including long term climate resilience.
- Farming businesses and the pastoral sector better-positioned to respond to emerging market and regulatory demands (e.g., climate, freshwater).
- Significant environmental benefits, including carbon sequestration and emissions reductions (for 300 farms these are modelled at 17.6 million tCo2e sequestered or reduced emissions over 30 years), water quality and biodiversity benefits.
- Supports strengthening New Zealand's export reputation, including contributing to New Zealand meeting its international commitments under the Paris Accord, UN Sustainable Development Goals, and Convention on Biological Diversity.
- Downstream impacts avoided to infrastructure, lives and livelihoods through reducing the impacts of erosion during major weather events.

About The Nature Conservancy Aotearoa New Zealand

The Nature Conservancy Aotearoa New Zealand is an organisation of dedicated staff, scientists and members advancing effective, lasting conservation in New Zealand. It is part of an international organisation working in more than 70 countries around the world to help people and nature thrive.

TNC NZ's priorities are native species and habitat, healthy oceans and coasts, climate resilience and regenerative agriculture, and building the capability of the sector. It works in partnership with local communities, iwi, universities and central and local government.

As well as co-funding the project, TNC NZ has contributed overseas expertise, modelling and planning tools to support improving farm practices. TNC NZ can call upon global expertise and tools to contribute to policy and research to benefit Aotearoa.

Hawke's Bay Regional Council

Environment and Integrated Catchments Committee

12 June 2024

Subject: Sediment impacts from the February 2023 Cyclone Gabrielle event on marine environments of Hawke Bay

Reason for report

1. This report presents a summary of the work by NIWA funded both by NIWA and Fisheries New Zealand assessing the sediment impacts on the coastal environment following Cyclone Gabrielle.
2. NIWA presented this work to the Hawke's Bay Marine and Coast Group (HBMaC), which HBRC facilitates. HBMaC recommended NIWA present this work to Council.
3. This report provides valuable information on the immediate impacts and recovery of parts of the coastal marine area in the first 7 months following Cyclone Gabrielle.

Executive summary

4. NIWA conducted vessel surveys in April, June and October 2023. Work included mapping selected areas of the seafloor, surveying life on the seabed using a towed underwater camera and obtaining sediment core samples. Sediment samples were also collected from river mouths to determine which rivers contributed to sediment deposits in the coastal marine area.
5. Additionally, NIWA created a sediment transport model to characterise the spatial extent and longevity of the sediment plumes generated by Cyclone Gabrielle. Satellite images of sediment plumes were also used to inform this model.
6. The influence of Cyclone Gabrielle lasted approximately two to three months across the Hawke's Bay coastal marine area, with surface ocean parameters largely returning to normal by May. This means the chronic impacts of cyclone sediment effectively started the high turbidity typically seen in winter 3-4 months early.
7. Sedimentation in Hawke Bay was largely dominated by fine sediment discharged from the Mohaka and Wairoa-Nuhaka Rivers.
8. Seabed mapping revealed areas of significant seabed sediment erosion, and deposition up to about one metre in thickness, at Pania Reef, Tangoio Reef and Clive outfall area in Hawke Bay. Smaller deposits (up to ~15 centimetres) were observed in core samples, with notable deposits recorded off Wairoa River and the largest deposit recorded off the Ngaruroro.
9. Kelp and sponges that were recorded by HBRC on Wairoa Hard before the cyclone were almost completely or completely absent after the cyclone.

Strategic Fit

10. This report contributes to our strategic goal of healthy, functioning and climate-resilient biodiversity (HBRC Strategic Plan 2020-2025).
11. This work will contribute to the next State of the Environment report, including post cyclone impacts on the coastal marine area.
12. This work will contribute to the development of the Regional Policy Statement and management of the coastal marine area.

Background

13. One of the largest threats to coastal marine area is sediment from land both suspended in the water and deposited on the seabed.

14. Waves and currents cause resuspension and transport of deposited sediments which amplifies the impacts on the ecosystem. Resuspension was evident in this work through the turbidity near the seabed seen on camera deployments and in the sediment transport model.

15. Both sediment deposition and resuspension of deposited sediments from waves in the Hawke's Bay coastal marine area were amplified by Cyclone Gabrielle.

16. Increasingly frequent and intense extreme weather events, such as cyclones, will likely put further stress on seafloor marine ecosystems by accelerating soil erosion and sediment yield to the ocean via rivers.

Discussion

17. During and post Cyclone Gabrielle, river plumes into Hawke Bay were coastally attached and transported clockwise (northerly) around the bay.

18. Sedimentation in Hawke Bay occurred mainly close to shore in the western and central parts of the bay. The generally shallow topography of Hawke's Bay led to an increased retention of sediments immediately following the cyclone.

19. Seabed erosion from wave action occurred off Cape Kidnappers and Mahia Peninsula. These regions are more exposed to offshore currents and waves, making them more susceptible to erosion. Inshore, deposition of sediments was along the coast either side and offshore from Ngaruroro River mouth. There was also significant deposition of sediment off the Mohaka River mouth, crossing the Wairoa Hard and fanning out offshore confirming the contribution of riverine sediments at this location.

20. Mean monthly total suspended sediment concentrations in February were significantly elevated, but they did not exceed values typical of winter months.

21. The Mohaka River dominated sedimentation at nearshore sites and reducing offshore. Where several sediment layers were analysed in the top ~10 cm of the event deposit, the results indicated that the contribution of the Wairoa-Nuhaka Rivers increased towards the surface (i.e., most recently deposited).

22. Other sites observed in Hawke's Bay showed no obvious signs of impacts from Cyclone Gabrielle

    22.1. Kelp was absent in both pre- and post-cyclone at Cape Kidnappers, indicating that chronic sediment impacts may pre-date Cyclone Gabrielle.

    22.2. At sites where kelp beds persisted, Pania Reef and sites south of Cape Kidnappers, plants appeared healthy post-cyclone.

23. Sediment fauna varied between the June and October samples.

24. The impact of extreme weather events is made worse by decades of increased sedimentation in New Zealand's marine environments. Addressing the long-term issue of sedimentation in marine ecosystems and the impacts of extreme weather events will require addressing the factors that have made New Zealand's catchments more prone to erosion.

25. This work further highlights the need to support appropriate land use change within our catchments and the immediate importance of our Erosion Control Scheme and the potential that Land for Life will have in making these changes over time.

Next Steps

26. NIWA will soon be publishing a report on the contribution of specific rivers to soil erosion and downstream impacts of sedimentation in the marine environment following Cyclone Gabrielle

(Cyclone Gabrielle sediment analysis SEA2022-13).

27. HBRC is supporting NIWA to attribute specific land use types to sediment samples collected from the Hawke's Bay coastal marine area from soil samples taken from various land uses in the Ngaruroro and Mohaka catchments. This catchment soil source library will be useful for apportioning sedimentation events and investigations to land use drivers.

28. The work presented today, along with all post cyclone monitoring in the coastal marine environment, will feed into the upcoming State of the Environment report.

Decision-making process

29. Staff have assessed the requirements of the Local Government Act 2002 in relation to this item and have concluded that, as this report is for information only, the decision-making provisions do not apply.

Recommendation

That the Environment and Integrated Catchments Committee receives and notes the *Sediment impacts from the February 2023 Cyclone Gabrielle event on marine environments of Hawke Bay* staff report.

Authored by:

Becky Shanahan
Senior Scientist Marine & Coasts

Sam French
Acting Manager Science

Approved by:

Iain Maxwell
Group Manager Integrated Catchment Management

Attachment/s

1 Cyclone Impacts on Fisheries 2024 report Under Separate Cover

Hawke's Bay Regional Council

Environment and Integrated Catchments Committee

12 June 2024

Subject: Alligator Weed update

Reason for report

1. This item provides an update on the alligator weed incursion at Lake Whatumā and presents the planned approach for managing alligator weed in Hawke's Bay.

Executive summary

2. Alligator weed (*Alternanthera philoxeroides*) was discovered at Lake Whatumā on 12 April 2023. It is the first known detection in Hawke's Bay. Alligator weed is considered one of the world's worst weeds and is listed as an Exclusion Pest in the Hawke's Bay Regional Pest Management Plan (RPMP). Council staff quickly responded to this incursion undertaking surveillance, delimitation surveys, control, stakeholder engagement and public awareness. The infestation is currently contained to Lake Whatuma and Mangatarata Stream.
3. A management plan has been drafted which outlines the actions required and associated costs in managing this weed. Although the biology of Alligator weed will make eradication very challenging, staff propose that its current restricted distribution in Hawke's Bay, the threats posed by the weed and control tools available are sufficient to justify taking an eradication approach, noting it may take 10 plus years to achieve zero density.

Strategic fit

4. Regional councils have a mandate under Part 2 of the Biosecurity Act 1993 (the Act) to provide regional leadership in activities that prevent, reduce, or eliminate adverse effects from harmful organisms that are present in their region. Council therefore has this leadership role in the Hawke's Bay region.
5. The purpose of the Hawke's Bay Regional Pest Management Plan (RPMP or Plan) is to provide for the efficient and effective management or eradication of specified harmful organisms in the Hawke's Bay Region.
6. The purpose of the Plan is to:
    6.1. minimise the actual or potential adverse or unintended effects associated with those organisms, and
    6.2. maximise the effectiveness of individual actions in managing pests through a regionally coordinated approach.
7. Regional pest management sits within a biosecurity framework for the Hawke's Bay region, which includes the Regional Pest Management Plan, the Hawke's Bay Biodiversity Strategy and the HBRC Strategic Plan. Neighbouring Regional Pest Management Plans and national legislation, policy and initiatives have also influenced Hawke's Bay's RPMP.
8. A regional approach to pest management supports Council's healthy functioning biodiversity in its Strategic Plan and the strategic outcome that agricultural and environmental pests are managed and eradicated through the RPMP.

Background

9. In the 2022-23 financial year the Biosecurity team commissioned a series of environmental DNA (eDNA) tests on waterways across Hawke's Bay as a new surveillance tool for pest plants. A weak

positive for Alligator weed was detected on the Mangatarata Steam which led to the discovery of the infestation at Lake Whatumā on 12 April 2023.

10. Alligator weed is a perennial aquatic or terrestrial herb with long fibrous roots that can be up to 10 meters long. It creeps along the ground or can float on water. Originally from Brazil, it is thought to have arrived accidently in New Zealand in the early 1900s.

11. Alligator weed does not set seed in New Zealand but spreads aggressively from even the smallest stem fragments. It can double in area in less than two months. It is tolerant of high temperatures, moderate salinity, grazing and high pollutant levels.

12. Alligator weed threatens agriculture, market gardens and urban properties (often dominating lawns). It clogs waterways and drains, increasing sedimentation and flooding risk. Access to waterways for recreational purposes (boating, fishing) can be blocked, and plants may affect whitebait spawning areas.

13. It can out-compete pastures and crops, affecting farm production and profit. Although stock will eat it, Alligator weed is toxic and can cause blindness and other health problems. The agricultural sector is at increasing risk of Alligator weed infestation due to movement of crops and agricultural contracting equipment. Farm owners are urged to have a weed hygiene plan in place to minimise the risk of invasion from Alligator weed and other serious pest plants.

14. Surveillance and delimiting surveys were undertaken by council staff and experts from Horizons Regional Council and Waikato Regional Council. The total area confirmed infested is estimated to be 15 ha and is primarily within and around the edge of Lake Whatumā plus some small infestations down the Mangatrata stream. Given the size of this infestation, it is likely that it has been established at Lake Whatumā for several years. The source of the Alligator weed is unknown but there are many vector pathways, including dirty machinery and equipment, boats, duck decoys and eel nets.

15. Alligator weed is listed as an Exclusion Pest in the RPMP. This means council has an obligation to prevent the establishment of Aligator weed. To do this staff consider that an approach to eradicate it from Whatumā is required.

16. The RPMP is underpinned by the Biosecurity Act which provides council staff with the appropriate powers to undertake surveillance, control and manage vector pathways. Alligator weed was declared a pest within this plan due to its impact on the environment and primary production.

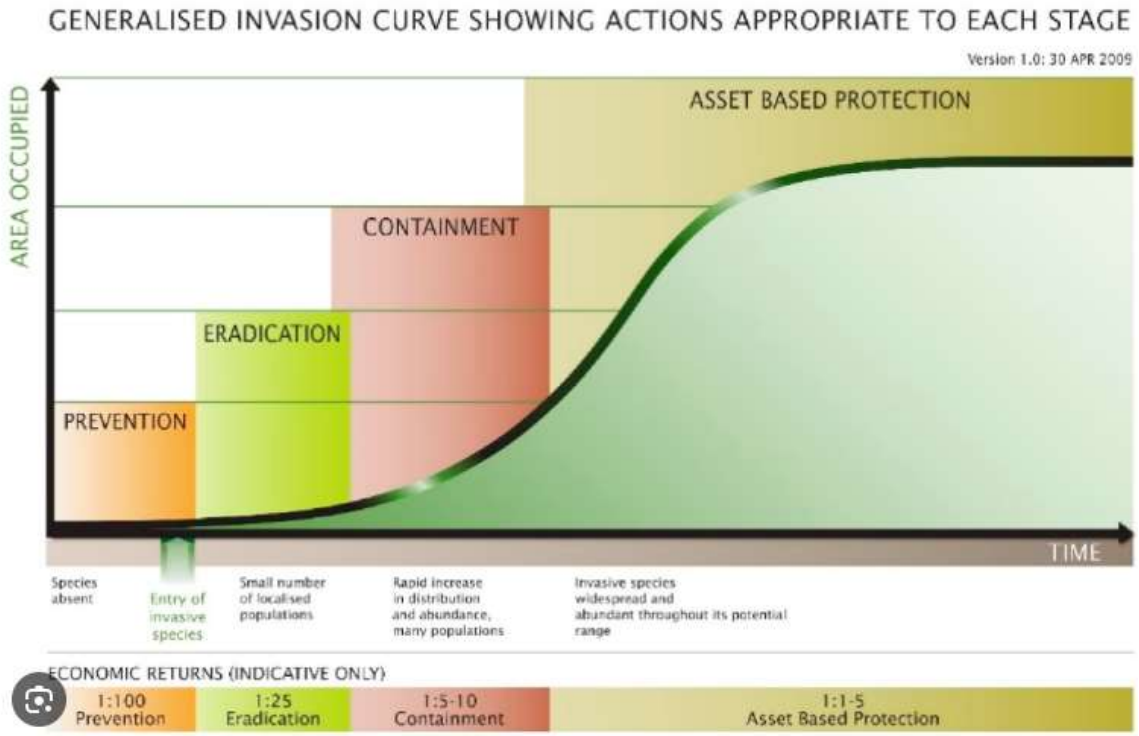
17. An Alligator Weed Management Plan has been drafted (attached) which outlines the actions required and associated costs in managing this weed over the next three years.

Discussion

18. As mentioned above, regional councils have a mandate under Part 2 of the Biosecurity Act 1993 (the Act) to provide regional leadership in activities that prevent, reduce, or eliminate adverse effects from harmful organisms that are present in their region. This is largely undertaken through having a Regional Pest Management Plan. Within this plan, Alligator weed is declared an Exclusion pest due to its potential impact to the environment and primary production. If left uncontrolled, Alligator weed would spread over time across many of our lakes, wetlands, and slower moving waterways in Hawke's Bay (e.g., Pekapeka Swamp, Lake Runanga, Lake Tūtira, Whakakī Lake, Karamū Stream) as well as invading pasture and crops adjacent to these waterways.

19. Preventative measures such as eradication, that seek to manage pests while their populations are still low on the invasion curve, are the most cost-effective approaches to protecting the natural environment, primary production, and other values at risk from pest impacts. However, eradication is technically challenging and requires some very specific conditions to be met to be successful.

20. Unfortunately, the biology of Alligator weed will make eradication very challenging. However, staff propose that its current restricted distribution in Hawke's Bay, the threats posed by Alligator weed and control tools available are sufficient to justify taking an eradication approach, noting it may take 10 plus years to achieve zero density.



21. Biosecurity staff have been leaning on the technical expertise from neighboring regional councils for both the initial incursion response and in drafting the Alligator Weed Management Plan. Apart from Auckland and Northland, all North Island regional councils are either excluding, eradicating, or progressively containing Alligator weed in their regions. The Alligator Weed Management Plan outlines the steps required to actively manage Alligator weed in Hawke's Bay.

Funding the eradication plan

22. The cost to deliver this plan over the next three years of the Long-Term Plan is approximately $100,000 per annum. For this funding to be made available, staff have weighed this work against other biosecurity programmes to find the required funding within existing budgets. In our draft LTP budget we have redirected $100,000 from our PCA Possum Education Monitoring workstream, towards Alligator weed.

23. Within our PCA programme, we allocate budget to conduct our annual possum education monitoring programme to monitor landowners' progress to ensure they meet our 4% RTC target. This budget pays contractors to place chew cards on the property, retrieve them a week later, read them to identify whether the landowner meets the RTC 4% target, and report back to HBRC.

24. The PCA budget was doubled in 2022 after staff identified that monitoring was showing increasing possum hotspots throughout the region.

25. To reduce costs post-cyclone for the current LTP, we have reduced our overall biosecurity budget by $100k in year one of the LTP. On top of this we will need to further reduce some areas of work to fund the proposed Alligator weed eradication programme ($100k) and to continue our Wilding Conifer work ($60k)—that was previously funded by MPI.

26. We proposed reallocating budget ($260K) from our PCA Education Monitoring Programme to achieve this. Note that the $100K reduction for year one in added back into year two making the PCA reduction $160K.

	Baseline	Year 1 (less $260k)	Year 2 (less $160k)	Year 3 (less $160k)
PCA Programme Monitoring: **- Education Monitoring** - Compliance Monitoring	$789k $769k $20k	**$529k** **$509k** $20k	**$629k** **$609k** $20k	**$629k** **$609k** $20k
Boundary control	$105k	$105k	$105k	$105k
River berm control	$22k	$22k	$22k	$22k
Maintenance Assistance	$60k	$60k	$60k	$60k
PCA PROGRAMME TOTAL	**$996k**	**$736k**	**$836k**	**$836k**

27. The consequence of this will be contractors visiting fewer properties annually to monitor their possum control progress. Approximately, we would reduce our coverage from 500,000 ha down to 335,000 ha (in year one) and then 400,000 ha (in years two and three). The PCA area is currently just under 800,000 ha.

28. The risk associated with this change is that landowners could relax their possum control efforts, knowing we won't monitor as frequently, resulting in increased possum densities in hotpots throughout the PCA. We aim to mitigate this this by increased awareness of the issue and the importance of keeping up possum control, via direct communications. However, we note that experience has shown us that direct monitoring is the most effective way of ensuring compliance with the PCA requirements.

29. Staff note that the draft LTP indicates that our level of service measure for the PCA programme as being – *Percentage of the Possum Control Area (PCA) with a 4% or less residual trap catch, with a minimum of 30% of PCA monitored each year.* So based on the changes noted in paragraph 27 above, we would still meet the minimum required threshold.

Next steps

30. The Alligator Weed Management Plan will be implemented beginning in the 2024-25 financial year. Progress on this programme will be reported annually to Council through the Biosecurity Operational Plan and Annual Report.

31. An annual review of this programme will be undertaken by staff to track progress and assess the efficacy of the control techniques. Further surveillance for alligator weed will be undertaken across the region. The discovery of new populations may result in having to change the planned approach for managing alligator weed.

Decision-making process

32. Staff have assessed the requirements of the Local Government Act 2002 in relation to this item and have concluded that, as this report is for information only, the decision-making provisions do not apply.

Recommendation

That the EICC notes the proposed approach to managing the Alligator weed incursion and highlights any areas of concern.

Authored by:

Mark Mitchell
Principal Advisor Biosecurity Biodiversity

Jolene Townshend
Manager Catchment Operations

Approved by:

Iain Maxwell
Group Manager Integrated Catchment Management

Attachment/s

1 Alligator Weed Management Plan May 2024 Under Separate Cover

Hawke's Bay Regional Council

Environment and Integrated Catchments Committee

12 June 2024

Subject: HBRC environmental education update

Reason for report

1. This item is in response to a request from Councillor Roadley for an update on the value of Enviroschools and environmental education provided by the Regional Council's Environmental Education team.

Executive summary

2. Environmental education is crucial for developing environmentally responsible attitudes and ensuring a safe and secure future for generations to come. Our programme offers a range of resources and support for schools, aiming to ignite sustainable behaviours, promote collective action against climate change, and encourage innovation. We focus on motivating and educating students from 5 – 18 years through education programmes, resources, partnerships, and events.
3. For over 20 years HBRC has delivered a high level of environmental education. The partnership with the national programme Enviroschools, was deemed a good fit and matches up with 64 councils across Aotearoa investing in this kaupapa.
4. Hawke's Bay Regional Council is the Enviroschools (ES) coordinating agency for Te Matau ā Māui and as such supports the roles of regional coordination and facilitation delivery of the programme. In addition, we provide bespoke environmental education resources.
5. As part of our ES programme, we currently have 42 primary, intermediate, and secondary schools. In addition, we are in partnership with two kindergarten associations which is another 31 Enviroschools in our region. A potential to reach of 10,200 tamariki and students.
6. Impacts from Covid and, to a lesser extent Cyclone Gabrielle, have been a challenge in recent years and caused some slowing down of face-to-face delivery.
7. Currently we are in a strong position with three part-time facilitators under contract, plus the addition of 1 FTE to the Education Team since 2021. This role has enabled us to realise a dramatic increase in our connection with the secondary school sector.

Secondary outcomes

8. We organised a Youth Environment Challenge for secondary schools which ran in 2022 and 2023. The 2022 finalists were Sacred Heart College, Iona College, Havelock North High School, and Taikura Rudolf Steiner. The 2023 finalists were Havelock North High School, Sacred Heart College, Woodford House, and Karamu High School.
9. This was the catalyst for Sacred Heart College, Havelock North High School and Karamu High School taking the next step to become an Enviroschool. This year we have been working closely with these schools to ensure they feel fully supported. This has included presenting to all staff at before school sessions; attending student enviro group lunchtime meetings and providing advice to individual teachers on navigating the Enviroschools website to access relevant teacher resources.
10. We add value to our interactions with schools whenever possible and highlight all our current resources (described below), as well as linking into other HBRC experts or organisations for assistance. This can lead to combined workshops or activities and is appreciated by the teachers we work with.

11. Careers at HBRC – this year we have worked alongside People and Capability to create a presentation to deliver to secondary schools. This will highlight our careers and the benefits of working at HBRC, plus advice on the pathways to get there. Keeping it local we are working alongside EIT and their Environmental Management study programmes and the added benefits for Hawke's Bay students to take this path.

    11.1. The first outing for this presentation happens on Friday 7 June to a class at Karamu High School. This Geography class is undertaking a coastal study this term and we have our Coastal Specialist Dr Joao Albuquerque attending.

Resources

12. Our online education resources continue to expand. In 2023 several secondary school focused resources were offered for teachers – Biodiversity in Pekapeka Wetlands; Geographic understanding of Waitangi Regional Park; Life Processes in the Ahuriri Estuary and Sustainable Sse of the Tukituki River. Each of these online resources provide NCEA standards. They offer an option to use our local natural spaces as part of their teaching with the ultimate goal of students attaining NCEA credits.

13. This year, for our primary schools, we are launching He Taonga te Wai (Water is precious). Lesson 1, currently out for trial, introduces the context of water in Hawke's Bay, and is one of 6 topics which include – aquifers and water resources; people and water; stormwater; how we use water and how we can conserve it; and looking after water. Early feedback has been overwhelmingly positive. We are especially grateful for the assistance of Monique Benson, Water Management Advisor, in getting these off the ground.

14. One of our most used resources is sharing with schools the NIWA SHMAK (Stream health monitoring and assessment kit). Accessing the Tutaekuri River at Guppy Road has been our main location for this activity this year. Through these simple tests students gain a basic understanding of stream or river health. As part of our korero, we share the concepts of the results they see and what these results mean to the aquatic life we find. See attachment 1 for our list of participating schools.

Strategic fit

15. Enviroschools is a proven approach that effectively meets local government outcomes. The accessible resources provide all the tools a school needs and, with the skillful facilitator working alongside, the journey for the school is rewarding and wide reaching.

16. Evidence gained through the most recent national Enviroschools census shows the percentage of participants taking action across environmental, cultural, social, and economic aspects of well-being – the top ranking six include 100% zero waste, 97% Food production, 92% Food distribution, 92% Creative projects in the landscape, 88% Biodiversity and biosecurity, 83% Water health and conservation.

17. These outcomes align well with Hawke's Bay Regional Councils Strategic goals - *Our purpose - we work with our community to protect and manage the region's precious taonga of rivers, lakes, soils, air, coast and biodiversity for health, wellbeing and connectivity.*

Background

18. Keeping everyone updated on progress and highlights across our work streams is an important aspect of our work. Presenting in person to a council committee happens on an irregular basis. We do however provide an annual report that is shared with all our Council partners, funders, and collaborators. Alongside this a quarterly e-news is sent out to 170 subscribers which include schools, kindergartens, partners and councillors, among others.

19. We enjoy a collaborative relationship across TLA teams at Napier City Council, Hastings District Council and Central Hawke's Bay District Council. We are always looking for opportunities to support and add our environmental education knowledge or hands-on skills.

20. One recent example of this is assisting Hastings District Council on the revegetation project of the Hikanui Pa site at Tainui Reserve in Havelock North. This space suffered severe tree damage from Cyclone Gabrielle. We were asked to advise on coordinating a local schools approach, for schools to become kaitiaki of an area and participate in a long-term relationship with the area.

21. For several years now we have also welcomed financial support from these TLAs (NCC $15,000, HDC $15,000, CHBDC $10,000 p.a.) either through their waste minimisation fund or community services fund.

Discussion

22. Recently a feedback survey was sent to participating Enviroschools. We wanted to show and measure the value of what is being delivered and available. A precis of this feedback is shared below.

    22.1. How has the school community benefited from being an Enviroschool? What difference has it made?

        22.1.1. *It has a huge benefit to our wider community as the Enviroschool principles are now embedded into our school culture. The students are taking home their knowledge of the environmentally sustainable practices they are learning at School and the expectation that it is just the way we do things…**Omakere School***

        22.1.2. *I think being an enviro school focuses our thinking when planning, and teaching. We are beginning to put on a sustainability hat through all things throughout the school which is exciting to see and listen to. **Marewa School***

        22.1.3. *Being an Enviroschool has made a positive difference. The programme has provided regular and consistent "boots on the ground" support, lifted some of the workload on the teaching principal, and fostered an enthusiastic environmental culture at our small rural school. **Ruakituri School***

        22.1.4. *The environment is aesthetically pleasing, and the children are proud of it. It Provides a learning space that many enjoy and learn lots from vs classroom learning. Helps physically as well as with wellbeing.*

        Children are more aware of nature and their place. They are careful conservationists with water. Have learnt basic skills like planting edible gardens.

        *Helps integrate learning- science, literacy, maths, also good for building up of Key competencies and children working in an authentic Tūakana/Teina relationship **Argyll East School***

        22.1.5. *The Kaupapa of this school is exactly the same as Enviroschools and it is exactly what the community expect of the school so the support and resources could not be better. **Poukawa School***

    22.2. Were there any unexpected benefits or outcomes? Within your kura and/or wider community?

        22.2.1. *Many opportunities for empowering student leadership (not only for the older students but across all levels) Tūakana- Teina - fostering cross level relationships, teacher/student relationships, Environmental passions for students are unlocked, connection to our Localised Curriculum so many benefits for our tamariki and staff. **Omakere School***

        22.2.2. *Growing awareness of other teachers to what is happening in our community, Councils, government levels in the environment.*

        *Bringing in of parents to work in the shadehouse who may not normally have fitted in with other school groups. **Argyll East School***

22.2.3. *Parents are showing an interest in the projects we have going at school with casual conversations about chickens, worms, eggs, paper recycling, food waste. The lunch ladies have noticed a change in food waste and recycling. People have commented when we clean up the local reserve and streets around the school. The Menz Shed have been involved and made comment on the green school. Other schools, our Kahui ako have had discussion on the progress Marewa has made and the financial commitment the school has put into enviro education*. ***Marewa School***

22.3. How do you know you are making a difference? How do you measure or evaluate? Please share any evidence.

22.3.1. *Our biggest measurement is by the number of students that applied to become an Enviro Leader this year…They all have a passion and drive to help not only our school but their home and wider communities to be a clean, green, more sustainable planet for the future.* ***Omakere School***

22.3.2. *The way we connect with local initiatives, planting on Te Mata Peak. Service and giving back to the community are a big part of our school and seeing this through an Enviroschool lens has been powerful. Feedback from staff, parents, and students about what is working well****. Hereworth School***

22.3.3. *The Community often talk about it with me, and our students clearly have a connection with, and take pride in, our environment, particularly our plantation area which we are co-developing. We have also changed our school values this year to link more closely with this and in particular, our value of 'We show KAITIAKITANGA' is a new school value. Students are able to articulate what this means in relation to looking after our environment.* ***Poukawa School***

22.3.4. *Students want to be in the enviro warriors group, they are enthusiastic about the school and community environment. They volunteer for roles planting the gardens, looking after the hens and worms and being a power ranger to save power…* ***Marewa School***

Next steps

23. Working and engaging across council teams allows us to work with subject specialists and we are gratefully that this is available.

24. Developing new topical resources for primary and secondary schools in conjunction with key staff will continue. Being able to offer schools activities relevant to our place and meet their requirements of local curriculum outcomes is a key deliverable for the team.

25. We will continue to engage with as many schools as possible and always look to grow our Enviroschools whanau. A recent *Introduction to Enviroschools* event for local Napier Schools has resulted in two schools interested in pursuing further.

26. We continue to be proactive with our sustainable and environmental kaupapa, ensuring we liaise and collaborate with our partner Councils and other organisations to meet the needs and requests from the school community and other groups as required.

Decision-making process

27. Staff have assessed the requirements of the Local Government Act 2002 in relation to this item and have concluded that, as this report is for information only, the decision-making provisions do not apply.

Recommendation

That the Environment and Integrated Catchments Committee receives and notes the *HBRC environmental education update* staff report.

Authored by:

Sally Chandler
Recovery Planning Coordinator

Approved by:

Mike Johansson
Director Communications & Engagement

Attachment/s

1⇩ Stream health monitoring and assessment kit bookings 2024

SHMAK Bookings 2024			
SCHOOL/GROUP	**DATES**	**TOTAL**	**Notes**
TERM 1			
NGHS - in class demo w/Hinerangi	Weds 28 Feb	X2	
Te Pohue School Helen @ Mohaka	Fri 1 March	X1	9am-2pm
Iona College P/U from Dalton Street for awa visit	Pick up: Thurs 29 @ 3pm Drop off: Tues 5/3 pm	X2	Self guided
Taradale HS	Pick-up: Fri 1 March after 3pm Pick up: Mon 4 March pm	X2	Self guided
Sea week event – Tutaekuri 4-6pm	Tues 5/3	X4	Sally, Hinerangi and Spencer
NGHS Tukituki awa testing x4 kits w/ Hinerangi	Weds 6/3 – all day	X4	
Sea week event – Tutaekuri 4-6pm	Thurs 7/3	X4	Sally, Hinerangi and Spencer
NGHS in class demo	Tues 12 March	X4	From 8am Tues 12 March – to 3pm Weds 13 March Drop off Weds pm
NGHS Tuki tuki awa testing x4 kits	Weds 13 March	X4	
Tamatea HS	Thurs 14 March – in class demo	X2	9am-1pm
Arthur Miller School 4 x classes Hinerangi & Sally	Tues 19 and Wednesday 20 March	X4	9am-12pm
Tamatea HS	Thursday 21 March – Tutaekuri testing	X4	8am-1pm
Otane School (Melissa CHB)	6 March Waipawa River	X 2	9.30 - 12.30
Pukehou School (Melissa CHB)	20 & 21 March Waipawa River	x2	9.30 - 12.30
Pakipaki Kura & Irongate School @ Helen	27 March Houngarea Marae	X 2	9.30 - 12.00
Napier Boys HS 8 x classes 2 sessions Hinerangi & Sally	5 April Tutaekuri	X 4	9.00 – 10.00 12.00 – 1.00

TERM 2			
Correspondence School Hastings	Thursday 2 May 9am-1pm	X2	Booking for Sally
Hereworth School Scouts Gully HN	Monday 6 and Tuesday 7 May 9am-1pm	X2	Booking for Helen
YEA group Tutaekuri	Wednesday 8 May 3pm	X2	Hinerangi
Ignite Youth Group Tutaekuri	Tue 28 May 9 am	X 2	Hinerangi
Flaxmere College	Wednesday June 12	X4	Hinerangi

Hawke's Bay Regional Council

Environment and Integrated Catchments Committee

12 June 2024

Subject: Update on the IRG flood control and drainage programme

Reason for report

1. This item provides the committee with an update on the IRG programme of work including the current status of all projects within this programme. It is not intended to be a comprehensive review of all activities that have been undertaken, however, it provides a formal update to the committee.

Background

2. In the 2020 Budget, Cabinet agreed to provide a $3 billion investment in infrastructure to support New Zealand's economic recovery as part of the 11 May Covid-19 Response and Recovery Fund.
3. New Zealand River Managers Special Interest Group collectively put forward an application to this fund for a programme of work associated with flood risk and climate resilience across New Zealand.
4. This bid was successful, resulting in total programme funding of $30m for Hawke's Bay Regional Council, including co-funding requirements.
5. As a result of Cyclone Gabrielle delaying the programme in June 2023, Council staff commenced negotiations on a variation to the Kanoa funding agreement to extend the funding timeframes and modify the agreed programme.

The IRG programme

6. The original approved IRG programme consists of 4 main pillars as identified in the table below, together with co-funding requirements.

Work Programme	Programme Cost	Co-Funding (HBRC)	Funding	Status
1. Heretaunga Plains Flood Control Scheme	Up to $20,000,000	Up to $7,200,000	Up to $12,800,000	Modified Programme
2. Wairoa River Scheme – River Parade Scour Protection	Up to $1,000,000	Up to $360,000	Up to $640,000	Completed
3. Upper Tukituki Flood Control Scheme – SH50 Bridge	Up to $1,000,000	Up to $360,000	Up to $640,000	Completed
4. Upper Tukituki Flood Control Scheme – Gravel Extraction	Up to $8,000,000	Up to $2,880,000	Up to $5,120,000	Ongoing
CROWN FUNDING TOTAL: Up to $19.2m LOCAL CONTRIBUTION: $10.8m				

Project 1: Heretaunga Plains Flood Control Scheme (Levels of Service) - $20m

7. The original programme of work sought to increase the rate at which works were complete to improve the level of service provided by the scheme to a 1 in 500 year flood level of protection, including allowances for climate change and sea level rise, together with improved resilience for the higher velocities anticipated from the increased flood flows.

8. This funding was proposed to deliver 5 upgrades of the approximately 42 required to complete the level of service upgrade process.

9. HBRC co-funding of $7.2 million was required to match IRG funds of $12.8 million.

10. In conjunction with the extension of the funding timeframes associated with the Kanoa funding contract, the original programme of work has been modified to incorporate predominantly enabling works for potential future upgrades and/or scheme review related projects.

Project 2: Upper Tukituki Gravel Extraction Flood Control Scheme - $8 million

11. Gravel aggradation across this scheme has been an area of concern for the last decade.

12. This project involves the removal of 800,000m3 gravel from Central Hawke's Bay rivers to maintain existing nameplate capacity of 1:100 level of protection from Upper Tukituki scheme.

Project 3: Upper Tukituki Flood Control Scheme SH50/Waipawa Erosion - $1 million

13. The left bank of the Waipawa river immediately upstream of SH50 bridge has eroded significantly over the past five years.

14. This project provides engineered erosion protection works for the southern approach to NZTA's SH50 bridge.

15. This project received co-funding from Waka Kotahi to the value of $300,000.

Project 4: River Parade Scour Protection, Wairoa - $1 million

16. The Wairoa River had gradually undermined the embankment immediately south of the Ferry Hotel. This had in turn compromised Wairoa District Council (WDC) water assets and, more recently, Carroll Street and River Parade.

17. This project provided steel sheet piled erosion protection works on the left bank of the Wairoa River.

18. This project received co-funding from Waka Kotahi to the value of $180,000.

Social procurement

19. In keeping with the purpose of the Covid-19 Response and Recovery Fund as an economic stimulus following lockdown, key conditions of the funding agreement with the Government stipulated the requirement to achieve social procurement outcomes.

20. Acceptable social procurement outcomes include:

    20.1. New employment

    20.2. Preservation of jobs

    20.3. Redeployment of workers

    20.4. Supplier diversity

    20.5. Skills and training

    20.6. Environmental responsibility

    20.7. Investment toward more productive, sustainable and inclusive economy.

21. The realisation of these outcomes occurs predominantly in the construction phase of the project.

Programme funding timeframes

22. The original funding agreement committed to funding a 3-year programme of work commencing on the date of execution of the agreement 20 November 2020. The original

timeframe deadline for funding for this programme of work was 20 November 2023.

23. Kanoa – Regional Economic Development and Investment Unit recognised the significant impact that Cyclone Gabrielle has had on HBRC's programme and generally have a desire to see the programme completed and so agreed in principle to an extension to this funding timeframe.

24. A variation to the funding contract to extend the funding deadline to 30 June 2025 has been successfully completed. This extension includes a modified programme for the Heretaunga Plains Flood Control Scheme component of the work programme.

Current programme status

25. The Wairoa River Protection and SH50 Waipawa River Erosion Protection projects were completed in September 2021 and September 2022 respectively.

26. In additional to an extension to the funding deadline, HBRC is requested a change to the programme to undertake a number of enabling tasks for future Level of Service Upgrade projects.

27. The revised programme consists of predominantly enabling works. The summary below provides project specific information on the proposed variation to programme.

28. The Variation was approved by Kanoa on 13th of May 2024.

Heretaunga Plains Flood Control Scheme – Status Update

Moteo stopbank upgrade

29. This project is part of the original programme. This project has a completed detailed design and all tender documentation is completed for the original design. Consenting was due to be completed by March 2023 with construction completed by November 2024.

30. The revised programme includes advancing the project to fully consented status, and primarily includes completing a Cultural Impact Assessment to support the lodging of the Earthworks Consent Application with Hastings District Council. It is envisaged that consents will be achieved by March 2025.

31. Findings from the Heretaunga Scheme Flood Scheme Review and Independent Review will be assessed to determine what if any modifications to the original design are required and associated consent, prior to going to construction.

32. The project team are actively working with Mana Whenua to progress this project.

Omaranui stopbank upgrade

33. This project is part of the original programme. This project has a detailed design completed to 60%. Consenting was due to be completed by March 2023 with construction completed by November 2024.

34. The revised programme includes advancing the project to fully consented status, and primarily includes completing a Cultural Impact Assessment to support the lodging of an Earthworks Consent Application Hastings District Council. It is envisaged that consents will be achieved by March 2025.

35. Findings from the Heretaunga Scheme Flood Scheme Review and Independent Review will be assessed to determine what if any modifications to the original design are required and associated consent, prior to going to construction.

36. The project team is actively working with mana whenua to progress this project.

Clive River erosion protection (Farndon Road)

37. This project is part of the original programme. Detailed Design was due to be completed by September 2023 with construction completed by March 2024.

38. The revised programme includes completion of detailed design and construction of river erosion protection, and proposes that detailed design reaches completion in September 2024, with construction due to be completed in June 2025.

39. Findings from the Heretaunga Scheme Flood Scheme Review and Independent Review, if available, will be assessed to determine what if any modifications to the original design are required and associated consent, prior to going to construction.

40. This project is progressing with detailed design on the preferred solution well underway.

East Clive stopbank upgrade

41. This project is part of the original programme. Detailed Design was due to be completed by August 2023 with construction completed by June 2024.

42. The revised programme includes advancing the project to fully consented status, and advancing the design to a level sufficient to support the consenting process. Due to the complex nature of the consenting requirements for this project, it is envisaged that consents will be achieved by June 2025.

43. This project is progressing with the design scope now modified to support the consent process so will not progress to a final completed design.

44. Findings from the Heretaunga Scheme Flood Scheme Review and Independent Review will be taken into account when finalising the design associated with this project.

Upper Tukituki Flood Control Scheme – gravel extraction

45. This project is part of the original programme.

46. Gravel extraction activities under the IRG programme were largely curtailed immediately following the cyclone, as contracting resource was required to assist with the rapid rebuild of stopbanks across the region. (The rapid rebuild did involve the extraction of 250,000m3 of gravel for rebuild activities, a proportion of which came from Central Hawke's Bay Rivers.)

47. Despite cyclone-related delays to extraction, Tranche 3 of extraction has been completed with the programme targeted volume of 800,000m3 of extraction reached, at a cost of approximately $6m, well below the budgeted amount.

48. Tranche 4 has successfully been tendered with contracts awarded for reaches either side of the Waipawa State Highway bridge. Extraction will commence once river levels reach satisfactory levels.

49. At least one further tranche of extraction is planned with a view to maximising total volume extracted utilising all remaining available funding. This tranche is likely to be informed by findings of the recent scheme reviews.

50. It is likely that funding would have been fully consumed by March 2025.

Recommission the Maraenui Stopbank

51. This project is not part of the original programme.

52. This project is proposed to recommission the Maraenui Stopbank (previously decommissioned when the current Brookfields upper and lower stopbank was constructed) in order to provide a secondary level of protection from flooding to residential areas of Napier.

53. The work will involve investigation, high level design and construction. It is envisaged that construction will be completed by June 2025.

54. Geotechnical investigation and design support has been scoped and is currently being procured.

Investigations to compile a catalogue of available borrow material

55. This project was not part of the original programme.

56. Work completed pre- and post-cyclone has highlighted that while there is an abundance of silt in the region, not all of it is suitable for construction purposes. Material availability will be a critical element of all successful future flood resilience projects.

57. This proposal involves geotechnical investigation in all reaches of the Heretaunga Plains Flood Protection Scheme, and permanent silt deposit sites created by the Silt Task Force to identify the quality and quantity of available borrow material throughout the scheme.

58. This will enable the volume of suitable available borrow material to be quickly understood and targeted for all future stopbank construction projects.

59. This work is currently being scoped, with an understanding on the extent of available information also being developed.

60. It is envisaged this work will be completed by March 2025.

Investigation and design for future upgrade works

61. This project was not part of the original programme.

62. This proposal involves geotechnical investigation and detailed design for the following high priority reaches:

    62.1. Raupare Upper and Raupare Lower

    62.2. Chesterhope Upper

    62.3. Brookfields Lower

    62.4. Pākōwhai Park.

63. It is envisaged this work will be completed by June 2025.

64. A variation to the original programme is required to reallocate funding away from construction of original programmed works to fund this project through to completion.

65. This work is currently in the planning phase.

Undertake a partial Plan Change to the Hastings District Council District Plan

66. This project is not part of the original programme, and at Kanoa's request has been removed from the programme variation.

67. The IPMO is advancing this work outside of the IRG programme to support land category and future stopbank related projects.

68. Work has commenced on this initiative.

Programme summary

69. This programme is summarised below.

Project	Q1 24	Q2 24	Q3 24	Q4 24	Q1 25	Q2 25
Upper Tuki Tuki Flood Control Scheme - Gravel Extraction						
Ngatarawa	Completed					
Progress Moteo to fully Consented stage						
Progress Omarunui to fully Consented stage						
Continue with Farndon Road including Construction						
Continue with East Clive to pre construction stage						
Recommission Maraenui Golf Course Stopbank						
Borrow Catalogue for Heretaunga Plains Flood Control Scheme						
Geotechnical Assessment and Design for Raupare Upper and Lower						
Geotechnical Assessment and Design for Chesterhope Upper						
Geotechnical Assessment and Design for Brookfields Lower						
Geotechnical Assessment and Design for Pakowhai Park						

Decision-making process

70. Staff have assessed the requirements of the Local Government Act 2002 in relation to this item and have concluded that, as this report is for information only, the decision-making provisions do not apply.

Recommendation

That the Environment and Integrated Catchments Committee receives and notes the *Update on the IRG flood control and drainage programme* staff report.

Authored by:

Jon Kingsford
Manager Regional Projects

Approved by:

Chris Dolley
Group Manager Asset Management

Attachment/s

There are no attachments for this report.

Hawke's Bay Regional Council

Environment and Integrated Catchments Committee

12 June 2024

Subject: Update on the North Island Weather Events resilience programme

Reason for report

1. This item specifically focusses on the North Island Weather Events (NIWE) Resilience Programme.
2. The paper provides the committee with an update on the formation of Council's Infrastructure Programme Management Office (IPMO) and the current status of all projects within the recovery programme.

Background

3. The Crown and Hawke's Bay Regional Council (HBRC) entered into the North Island Weather Events (2023) – Hawke's Bay Crown Funding Agreement on 10 October 2023 (the NIWE Agreement).
4. The NIWE Resilience Programme consists of several initiatives to provide flood protection schemes to multiple communities across Hawke's Bay and it also incorporates upgrades to both pumpstations and stopbanks associated with existing schemes, as well as Telemetry upgrades and Scheme Reviews.
5. The packages of work funded through this agreement are highlighted below.

Severely Affected Land Areas	Co- Funding	HBRC Funding	Total
Wairoa	$70,000,000		$70,000,000
Pākōwhai	$70,676,470*	$23,373,530*	$94,050,000*
Whirinaki			
Ohiti			
Waiohiki			
Pōrangahau			
Sub Total			**$164,050,000**
Pumpstation Upgrades	$22,544,329	$7,455,671	$30,000,000
Rapid Repair – stopbank height increases	$22,544,329	$7,455,671	$30,000,000
Telemetry	$3,757,388	$1,242,612	$ 5,000,000
Scheme Reviews	$2,254,433	$745,567	$ 3,000,000
Total			**$232,050,000**

*For the purposed of this table the value for Tangoio (now Cat 3) and Joll Road (to be delivered by HDC) have been excluded from these values.

6. Crown Infrastructure Partners (CIP) has been appointed by central government as Administrator to our Crown Funding agreement and are mandated to distribute and manage the funding support under the NIWE Agreement and the Local Government Flood Resilience Co-Investment Fund.

Delivering the programme

7. A programme the size HBRC faces will have a significant impact on roles both within the traditional function of the Project Delivery team and across the organisation.

8. As well as a significant increase in demands on project management resources, the programme will require significant input from communications, community engagement, risk, health and safety, procurement and financial resources.

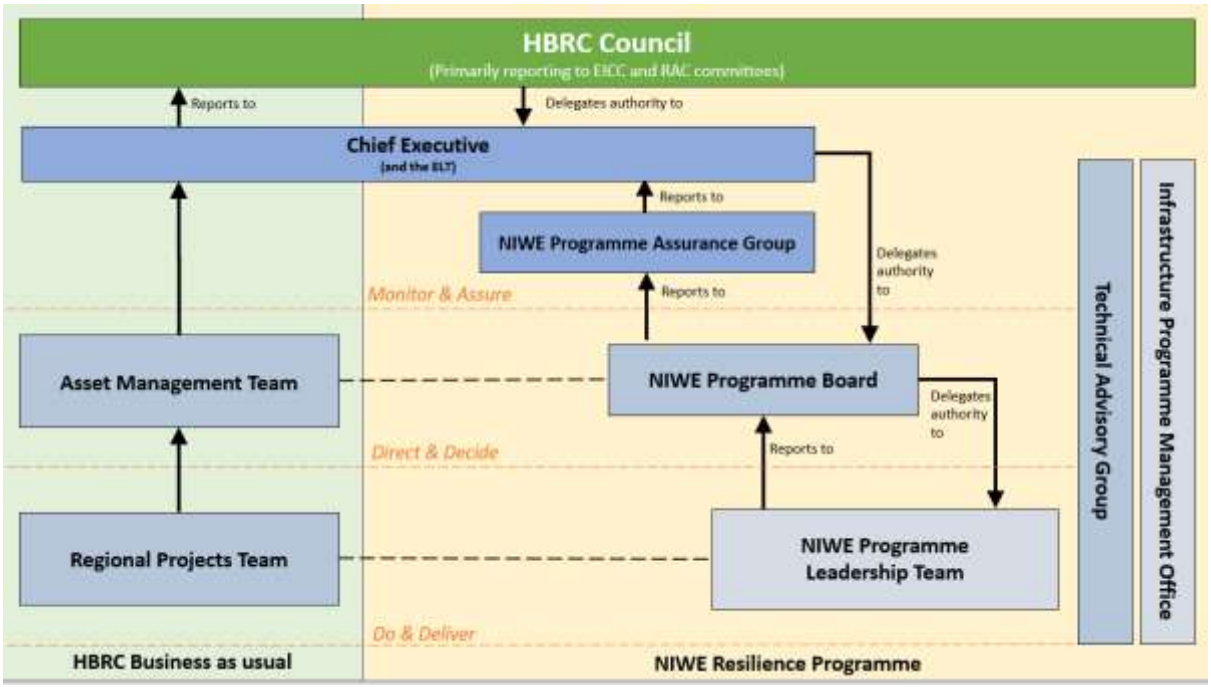
9. To better empower the successful delivery of this programme of work to meet the above objectives, an integrated approach to resourcing was proposed. With total programme escalation costs sitting at around $2m per month, to not resource the programme with resources of sufficient capacity and capability presents a significant financial risk to the organisation and the programme as a whole.

10. On this basis, the independent consultants recommended HBRC move to a Programme Management Office (PMO) approach to deliver the identified programme of infrastructure related projects.

11. The approved structure for the PMO represents an integrated team of 30+ professionals. Resources from the original Regional Projects team have transferred into the new PMO which, together with recent recruiting success, has filled 25 roles to date. A further 8 roles are in active recruiting processes.

Programme Assurance

12. Development of the Assurance framework for the IPMO is now completed and is illustrated in the figure below.



13. The key feature of this Assurance Framework is the Programme Assurance Group (PAG), which includes members of the Executive Leadership team to represent Asset Management, Finance and Telemetry, Crown Infrastructure Partners (CIP) and an independent assurance member providing programme specific oversight expertise.

14. The inclusion of CIP within the Programme Assurance Group (PAG) fulfils a requirement of our funding agreement with the Crown.

15. Terms of reference for the PAG have been finalised and monthly PAG meetings have begun, with a focus on the NIWE Resilience Programme controls, assurance and reporting processes. Full programme reporting is expected to be in place for the next PAG meeting.

16. In addition to PAG monthly Meetings, the IPMO Programme Director, Programme Finance and Controls Manager and Land Category Programme Manager meet with CIP on a weekly basis at an operational level to provide regular updates on various aspects of the NIWE Programme and

Projects. This also fulfils a requirement of our funding agreement with the Crown.

Programme delivery approach

17. In collaboration with the Asset Management, ICT and Finance teams a Project Lifecycle Management Framework has been developed into a module within TechOne that is now live and being actively used to form, track and control active projects. This tool is called the Project Lifecycle Management (PLM) tool.

18. The structure of the PLM framework is illustrated below. Gateways requiring Manager/Sponsor approval exist between each phase to ensure that projects are adequately progressed before embarking on the next phase of work.

19. Work is currently being undertaken on the IPMO framework and processes that will further strengthen HBRC processes toward ensuring a comprehensive, consistent and defensible approach is in place to progress the IPMO programme of work.

20. The PLM, in conjunction with PowerBI diagnostic software, will be used to fulfill the myriad of reporting requirements for the IPMO programmes of work. This will include reporting to CIP, Monthly Progress reports to internal and external stakeholders, and all of programme dashboard reporting.

21. Work continues for reporting templates and processes associated with all reporting requirements. Completion of these reports continues to be a manual exercise while we work to automate throughout the existing systems being used.

Programme update

22. The Programme team has been working with central government agencies and the Regional Recovery Authority to secure an Order in Council (OiC) for all NIWE projects that will enable the consenting process to be fast tracked to ensure timeframe expectations are best able to be met. This OiC was approved by Cabinet on 31 May and will be considered live on 7 June.

23. The IPMO have commenced writing the Project Delivery Plans (PDP) for submission to CIP. These are detailed delivery plans submitted following preliminary design which outline the scope of the proposed works, cost and time milestones and agreed project schedules.

24. To date 5 of the 10 project PDPs have been drafted with the 6th one almost finished. We are liaising with CIP regarding the potential bundling of our projects and intend to submit the first bundle of 5 projects in June 2024 once confirmed.

25. We expect the remaining project PDPs to be drafted and submitted in both July and August 2024 respectively.

26. The Programme team have also been developing the Strategic risk profile of the programme along with supporting Risk Management Plans which are still in development. Attached **(attachment 1)** is the NIWE Resilience Programme Risk and Performance Dashboard as at May 2024.

27. To date a total of $2.8m has been spent since beginning the work on these projects in June 2023, with a further $1.7m committed across the programme.

28. There is still some analysis and correction of costs being completed across the projects to ensure costs are in the correct project and we will update on these at our next report.

29. The Programme team is also developing Programme Level Dashboards and Reporting for the various management and governance layers of the NIWE Resilience Programme, along with Project level reporting. We will look to standardise the information where possible to gain reporting efficiencies at each level.

Project updates

30. Projects within the IPMO programme continue to be progressed as rapidly as possible and are following best practice in tasks planned and undertaken.

31. Where possible, tasks are being brought forward and/or run in parallel. For example, geotechnical investigations, survey of project areas and ecological investigations are being progressed earlier than usual to enable project timeframes to be condensed as much as possible.

Land Category Projects

Wairoa

32. Wairoa has now been classified as a category 2C.

33. The project team is currently working through the shortlist of options with the Stakeholder Engagement Group who were due to report to the Tripartite Group on the preferred option(s) at the end of March. This timeframe was extended to 20 June 2024 to provide time for supplementary reports to be developed and provided to the Stakeholder Group within the extended timeframe.

34. It is currently unclear whether the Stakeholder Group will support a single option due to the opposing interests of individuals within the stakeholder group. It is possible that the stakeholder group present a subset of the shortlisted options to the Tripartite group and HBRC as being least disruptive.

35. Each of the shortlisted options require access to land, including Whenua Māori land; in this regard securing appropriate rights to land to construct the preferred solution will be a critical path item and will need to be advanced as diplomatically and as empathetically as possible.

36. The project schedule is **attached** (**attachment 2**).

Whirinaki

37. Whirinaki, including Panpac is now classified as land category 2C.

38. The project team is currently working with the preferred option and has commenced preliminary design with site investigations underway to support that design.

39. Engagement with partners and stakeholders continues, including with Petane Marae in association with the development of a Cultural Impact Assessment and protection of urupa. Engagement is also ongoing with Waka Kotahi and Hastings District Council with respect to the requirement to increase the culvert capacity in the Whirinaki drain and the consequential need to lift the road height in this area to accommodate this requirement.

40. Engagement with landowners for property acquisition and access is also underway.

41. An aerial plan the preferred solution is included **(attachment 3).**

42. The project schedule is attached (**attachment 2**).

Waiohiki

43. Waiohiki is now classified as land category 2C.

44. The preferred solution has been selected and the project team is progressing all planning tasks

including detailed design, detailed site investigations, consenting requirements and landowner discussions.

45. Landowner discussions are ongoing and have the potential to push project timelines out.

46. Engagement with landowners for property acquisition and access is also underway.

47. An aerial plan of the preferred solution is included **(attachment 3).**

48. The project schedule is attached (**attachment 2**).

Ohiti

49. Ohiti is now classified as land category 2C.

50. The preferred solution has been selected and the project team is progressing all planning tasks including detailed design, consenting requirements and landowner discussions.

51. The project team is working with the Rural Recovery team in liaising with the *Between Two Rivers* group.

52. Additional modelling is being undertaken to determine if any adverse effects may result from the preferred solution and what additional work may be required to manage this.

53. Engagement with landowners for property acquisition and access is also underway.

54. An aerial plan the preferred solution is included **(attachment 3).**

55. The project schedule is attached (**attachment 2**).

Pākōwhai

56. Pākōwhai land category has now been finalised with a mix of Category 3 and 2C.

57. The preferred solution has been selected and the project team is progressing all planning tasks including site investigations, developed design, consenting requirements and landowner discussions.

58. A lively stakeholder meeting for Cat 2 landowners was held on 16 May at which the preferred option was presented. The project team is currently working through the feedback that was gathered from that meeting.

59. An aerial plan the preferred solution is included **(attachment 3).**

60. The project schedule is attached (**attachment 2**).

Havelock North

61. A preferred option has been developed. The delivery of the detailed design and construction will be undertaken by Hastings District Council.

Pōrangahau

62. Pōrangahau is now classified as land category 2A.

63. Productive community meetings were held in Porangahau on 22 and 30 April, at which the preferred solution was presented and community were generally in support.

64. The detailed site survey was completed at the end of May 2024 and we are awaiting data to confirm impact on design and confirm land requirements.

65. We are awaiting the survey results before we can confirm a move of properties to Cat 2C.

66. The project schedule is attached (**attachment 2**).

Pumpstation upgrades

67. These projects will provide new replacement drainage pump stations for the Pākōwhai, Brookfields and Mission pump stations.

68. A Senior Project Manager has been assigned to these projects and is actively progressing these projects.

69. Each project has now progressed to the initiate phase. Work to date has focused on infrastructure planning related activities including catchment analysis, development of standard specifications and the development of project briefs.

70. Site investigation work including detailed site surveys and geotechnical investigations are being progressed, as well as an ecologist review of Fish Passage requirements for each site. This is critical to each project as it will heavily influence the cost of each project.

71. A Procurement strategy and approach has been developed and an initial market briefing presented to the contracting market for a Design and Construct package of works. The main reason for this is to obtain efficiencies of time, cost and design across the projects.

Repair rebuild rework

72. This work refers to additional work to stopbanks repaired under the rapid repair programme. Stopbanks were repaired to the existing 'pre-Gabrielle' design standard of 1% Annual Exceedance Probability (AEP). This $30m provision was for any additional work that may be required to bring the repaired areas up to 1% AEP 'post-Gabrielle'.

73. The finalised NIWA report with confirmation of return period flood flows is required to input into river/flood models for detailed analysis to determine the scope of work that may be required at each of the repair such locations. This new return period information was received by HBRC on 8 March 2024.

74. Further detailed modelling is required to plan out these works and we are expecting results of after July 2024.

Telemetry projects

75. The CIP required business case has been drafted. We are awaiting CIP confirmation of bundling of these Asset Upgrade works in order to submit the PDP. We expect this to be lodged with CIP by the end of July 2024.

76. Where the necessary equipment has been identified, early procurement of this gear has been commenced.

Order in Council

77. Traditional resource consenting timeframes for new stopbank and pumpstation projects is lengthy and subject to further lengthy appeal processes with no guarantee of success.

78. Hawke's Bay Regional Council, with assistance from the Regional Recovery Authority (HBRRA), has been working with the Department of Prime Minister and Cabinet, Ministry for the Environment (MfE), Land Information New Zealand and the Cyclone Recovery Unit to develop regulatory relief for the land category related programme of work.

79. The purpose of the Order in Council (OIC) is to ensure a streamlined resource consent regime for flood works in eight areas of Hawke's Bay. This proposed OIC will apply in Wairoa, Whirinaki, Waiohiki, Ohiti Road/Omahu, Pākōwhai, Pōrangahau, Havelock North, and Awatoto (these last two are not part of HBRC's programme).

80. This proposal has achieved a significant milestone in terms of gaining Cabinet approval, subject to consultation in early March.

81. Council received confirmation that Cabinet had approved the order on the on 28 May and was publicly announced by Ministers on 31 May.

Decision-making process

82. Staff have assessed the requirements of the Local Government Act 2002 in relation to this item and have concluded that, as this report is for information only, the decision-making provisions do not apply.

Recommendation

That the Environmental and Integrated Catchments Committee receives and notes the *Update on the North Island Weather Events resilience programme* staff report.

Authored by:

Jess Bennett
Programme Finance & Controls Manager

Jon Kingsford
Manager Regional Projects

Approved by:

Chris Dolley
Group Manager Asset Management

Attachment/s

1	NIWE Risk and Performance dashboard	Under Separate Cover
2	Project schedules	Under Separate Cover
3	Project Aerial Plans	Under Separate Cover