Examples of Rōpū Taiao work

Updated 18 October 2023

LTP funded environmental projects that are now delivering outcomes

Compliance Monitoring and Enforcement (CME)

- Through the 21-23 LTP GW increased resourcing for compliance monitoring and enforcement. Six additional staff were brought on-board over the three-year period from 2021-2023.
- Because of this increased number of compliance officers on the ground, our compliance presence has resulted in us monitoring more activities affecting the environment and making sure they were meeting environmental standards and consent conditions.
- The best example of how this has impacted on the ground is in the forestry space - this is the area we concentrated on first with the extra staff back in 2021/2. Before the new staff came on board, only certain consented sites were monitored. With the additional staff, consented sites and some permitted activity (through the NES-PF) sites are now monitored. Environment issues on these sites are being identified and corrected early.
- We have also been able to increase our involvement in educating and engaging on the new farm plan rules with our landowners in the Parkvale and Waitawa communities, and begin monitoring some new rules in the NES-FW 2020 like intensive winter grazing and synthetic nitrogen reporting.
- More low-level enforcement was undertaken during the 2022-2023 year compared to at least the previous five years on records. With 76 infringement notices issued for breaches of the Resource Management Act.
- Because we now have two compliance teams, we've been working to initiate workshops with our mana whenua partners to understand how they want to be involved in compliance monitoring for the region.

Wetlands

- Based on the 2021-2031 LTP process, GW was able to invest $200K and recruit one additional staff member from 2024 for the purposes of mapping the region's natural inland wetlands.
- GW has mapped wetlands from aerial imagery across 2 areas of the 5 parts of the region. We've covered the Kapiti Coast, Porirua, Wellington and a bit of the Hutt Valley down to the Hutt River.
- We still need to ground-truth the "new" wetlands that aren't already identified as natural inland wetlands in our regional natural resources plan.
- The rest of the Hutt Valley and whole of the Wairarapa are left to assess and we are on track to complete this by the end of 2024. The additional staff member will be a big support in helping to complete this work.
- These ecosystems are threatened with extinction. As well as meeting a regulatory requirement under the National Policy Statement for Freshwater Management, improving GWs wetland knowledge informs our Natural Resources Plan.
- This $200K investment has enabled GW to map wetlands using aerial imagery that has then helped us in developing our desktop map of wetlands for the region.
- Importantly, the desktop mapping helps inform conversations with consent applicants to ensure that wetlands aren't lost on built on by developments.
- The desktop work can also help conversations with livestock farmers and foresters to help ensure they're compliant with national and regional policies.

Catchment function

- In the 2021-31 LTP process, we signalled an intent to move towards a catchment based delivery model. Over the past three years our investment in catchment approaches has resulted in the Mahi Waiora project, and He Tīmatanga Hōu, amongst other things.
- Mahi Waiora was established in 2018/19 as a pilot programme to solve environmental problems by collaborative thinking, planning and actions at a catchment level.
- The project prioritised integration under the old GW structure and established multi-disciplinary teams and engagement approaches with community.
- As a pilot scheme the Mahi Waiora approach was confined to three sub-catchments; Waitohu, Parkvale and Pouehe. Each was in a different context but the systems and processes were common across the region.
- Findings from Mahi Waiora informed the design of the new operating model and wider changes that began on May 22nd 2023 with He Tīmatanga Hōu.
- He Tīmatanga Hōu established a new function – Catchment – to integrate and prioritise GW's work at place through a community lens and with mana whenua.
- Relationships, momentum and work programmes identified through Mahi Waiora will be carried through in the new structure and operating model for GW.
- A catchment-wide approach enables us to better deliver for the environment, have closer engagement with our communities and with mana whenua to integrate our decisions with a rich mix of science and mātauranga Māori as negotiated and agreed with mana whenua.

Pest control

Investment on large forest management through the 2021-2031 LTP

- Aerial 1080 operations are currently the best means of controlling possums, rats and stoats over large, rugged areas. However, new technology for maintaining areas pest-free following 1080 operations without the further use of toxins are evolving.
- With the investment we have received, we plan to develop and monitor a trapping regime as part of this project to test if we can maintain the gains made following the use of aerial 1080, targeting multi-species control across a ~1,000 ha operational area in the Akatarawa Forest. This site is the ideal to trial this work as it is the home of northern rata, including some of the oldest in the country, that are particularly susceptible to possum damage.
- The four sites that require regular aerial 1080 operations contain some of the highest biodiversity values in the region. These are Akatarawa Forest, Pakuratahi Forest and Kaitoke Forest. Wainuiomata Mainland Island. In the absence of undertaking regular aerial 1080 operations these forests will degrade, biodiversity be lost and the forests' ability to provide quality water for consumption in the future will be reduced.
- The investment from the LTP will help us maintain possums and other pests to low levels through aerial 1080 drops. These drops need to be done approximately every 5 years, particularly in mast years which are occurring more frequently.

Wairarapa moana

- The Wairarapa Moana Wetlands Project began in 2008 to enhance the native ecology, recreational and cultural opportunities on public land in and around Wairarapa Moana.
- In the 2021-31 LTP, GW committed to holding Crown funding for the Wairarapa Moana Statutory Board to develop the Ruamāhanga catchment document as part of the shared settlement redress between Rangitāne O Wairarapa and Ngāti Kahungunu ki Wairarapa.
- Because of the LTP process, GW contributed $563,603 and additional staff time towards the project between 2021-2023.
- In 2022 the Wairarapa Moana Governance Group approved the Ecological Restoration Plan and the Engagement and Experience Plan for Wairarapa Moana, following significant engagement with tangata whenua and community through their development.
- The formal partnership between Ngāti Kahungunu, Rangitāne, DOC, GW and SWDC underpins the achievements of the project. The coordinated approach has kept a spotlight on the moana, and strengthened whanaungatanga (relationships) between agencies.
- The project has laid foundations for improving the mauri of the moana, and the connection between the moana and mana whenua, the moana and the surrounding community, as well as the connections between mana whenua and agencies. It established goals with higher aspirations for the moana, which were grounded in cultural as well as ecological values. The partners to the project were all in agreement that this was a place that deserved more attention and care.
- Because of the LTP investment, we have hit our targets for pest plant and animal control for Wairarapa Moana Wetlands, extending our coverage of restoration activities carried out to over 8.2 hectares.
- We were also able to bring in additional staff time to help secure project funding through Jobs for Nature in 2021. This has seen an increase in activities and enabled more mahi to take place on the ground, such as tree planting, increasing pest control activities and the

production of an environmental restoration plan, engagement and experience plan, a water quality plan and fish management plan. In particular:

  - A vehicle diversion fence along Ōnoke spit has been extended by 1.5 km to protect the vulnerable pohowera (banded dotterel) breeding habitat. The fence was installed by Ngā Kanohi Marae o Wairarapa (Marae Based Trades Training).
  - Ngā Kanohi Marae o Wairarapa have also repaired 1.2 km of fencing in JK Donald wetland to protect recent plantings.
  - Cawthron Institute has been contracted to assess the fish community in Wairarapa Moana to understand the current state and stressors, with a view to prioritising immediate and mid-term restoration strategies for taonga native fish.
  - Since the 2021-31 LTP was agreed four trapping networks have been added – bringing total trapping coverage to 521 ha. These trapping networks are checked monthly and, in some areas, twice monthly during breeding seasons. This will have eased the predator pressure on wetland birds present in the area.
  - Additional pest animal control includes night shooting on Ōnoke spit to target feral cats, rabbits, and hares. In the 2021/2022 summer a possum control operation was undertaken at JK Donald Wetland, in which a total of 1,397 possums were removed.
  - Between 2013 and 2022, Greater Wellington staff have worked with private landowners around Wairarapa Moana to achieve approximately 30km of riparian fencing and the planting of 74,000 indigenous plants. There are fifteen farmers with land directly around the lake shore. Twelve of them have participated in Greater Wellington's Riparian programme.
  - Between 2016 and 2022, Greater Wellington staff have worked with private landowners around Wairarapa Moana to protect wetlands on private land. Seven private landowners have participated in the Wetland Programme covering 20 wetlands (total of 146.3 ha). Approximately 3,142 indigenous plants and 2.8km of wetland have been fenced off.

- Improving water quality in Wairarapa Moana is a task that will take generations. The Ruamāhanga Whaitua Implementation Plan aims to meet objectives set by 2080 for Lake Wairarapa and 2040 for Lake Ōnoke.
- Over time, community groups and schools have participated in freshwater education programmes and other activities, including community action planning.1
- The project has boosted recreational and economic opportunities and ensures Wairarapa Moana is highly valued as a place of historical and cultural significance.

Climate Resilience Tranche One

- Because of the 2021-2031 LTP process, $23M of CAPEX funding was allocated to drive momentum for Climate Resilience. In addition to this, over $400,000 over 2.5 years was invested in the Broader Outcomes initiatives, building the resilience of communities alongside flood protection.
- The Broader Outcomes Programme is a co-designed project with GW and Ngati Kahungunu and Rangitāne. We jointly planned to deliver a suite of projects in the following 18 months.
- Projects that have been implemented via the Broader outcomes mahi include:
  - Planting of approx 65,000 trees allow for better habitats for aquatic life

[1] 22/23 Annual Report

    - The Seed Idea which purchased 23,000 plants from Department of Corrections, and initiated the relationship between Kahungunu and Corrections which has grown into Te Wao Nui
    - Development of Te Wao Nui - the platform Kahungunu are setting up to support tane, wahine, and rangatahi on release from Department of Corrections. KKW are leading the mahi with Corrections, Police, MBIE, DoC, MSD and GW.
    - Rangitāne has been contracted to Greater Wellington to plant 3,000 plants.
    - Two rongoā gardens were built for Ngāti Toa and Taranaki Whānui to support Rongoā Māori
    - 1,000 flax plantings were included in the Poets Park to support iwi future use of flax materials
    - We are aiming to sequester all the CO2 produced in the programme by 2028, which will then become carbon credits for GW
- We developed and delivered our Broader Outcomes programme in partnership with our main contractor, Mills Albert Limited (MAL), a Kāpiti-based, Māori-owned construction business, in the four iwi in areas where we delivered flood protection projects.
- Iwi were invited to be directly involved in decision-making on the design of individual flood protection projects. Iwi were also invited to share any related opportunities they saw to improve wellbeing or economic outcomes for mana whenua.

Te Awa Kairangi/Hutt River Floodplain Management Plan (2001)

- The scoping and planning of the Hutt River Floodplain Management Plans (FMP) was completed in 2001. The Plan recommend both structural, non-structural and environmental measures to reduce the flood risk to the floodplains with improvement to the environment. Greater Wellington Regional Council (Greater Wellington) has adopted a 40-year time frame to fully implement the Flood Management Plan (FMP), which commenced in 2001.
- During the 2020/21 financial year Flood Protection successfully obtained government funding from Kānoa - Regional Economic Development and Investment Unit (Kānoa) funding for resilient river communities.
- Kānoa granted GW $10.752M for GW's programme of work within this initiative. While initially a 1-year programme, with value $17.6 M, the programme finally comprised work at 22 different sites in 3 catchments over 2 ½ years, with budget value $23.6 Million.
- This funding has allowed works to be undertaken as part of the implementation of the Hutt River FMP

A major project delivery focus remains RiverLink which has moved from planning and consenting to delivery. Significant milestones for the project in the programme in the last year:

a. Resource consents and Notice of Requirements were granted in November 2022
b. The interim Alliance partners Aecom|Fletcher were appointed in April 2023
c. Vacant possession of properties purchased by GW started in late 2022 and continues into 2023.
d. Demolition and house moving contracts were awarded by GW to Ceres and Brittons respectively in mid-2023.
e. A standalone RiverLink team supporting the programme across GW was established in May 2023.

Kānoa funding has enabled work to be carried out at the following sites within Te Awa Kairangi/Hutt River during 22/23:

a. Stokes Valley Stream weir - A new, permanent rock weir was constructed in the Stokes Valley stream to replace the failed concrete block structure. Fish passage has been incorporated into the design, which includes 2 fish ramps and resting pools
b. River Road erosion - Construction along River Road (State Highway 2), directly across the awa from the Royal Wellington Golf Club, took place from June 2022 to July 2022. This mahi comprised construction of three groynes to help protect the riverbank from erosion.
c. Totara Park Horse Paddock Right Bank erosion - Across the river from River Road (State Highway 2) in Upper Hutt, one groyne was built along the riverbank to protect against erosion. Planting of willow trees was also undertaken to further protect against the erosion of the riverbank and planting of native plants carried out to increase biodiversity and community enjoyment. This work took place from July 2022 to August 2022
d. Awakairangi Park (Right Bank) erosion - Officers removed obstructions that were in the river (concrete blocks and boulders) and completed bed-recontouring work. This mahi will help protect against erosion of Awakairangi Park.
e. Port Road erosion - Greater Wellington and Hutt City Council (HCC) have worked together towards addressing erosion concerns for business and property owners in the Seaview area along Port Road, Lower Hutt. In addition to the physical works at Port Road, Broader Outcomes initiatives were completed at the site as well. Seven Pohutukawa trees were replaced at the site. Fishing platforms were built at the site after community request. Three penguin homes were installed at the site after penguin surveys were conducted.
f. Poets Park Upgrade - the park has been re-designed to increase recreational space (making it more pedestrian and cycle friendly) and to bring back biodiversity. More than 40,000 native plants have been planted. Rongoā gardens were also planted in the park, incorporating ~2,000 medicinal plants such as harakeke, kowhai, and manuka. Both carparks were upgraded to a chipseal to enable more parking and easier access.
g. Taita Park Upgrade and safety works - more than 7,000 native plants/trees were planted
h. Manor Park Shared Pathway – Hutt City Council managed the project to build a walking and cycling path through Manor Park's native bush. This work aimed to encourage more people to use healthier, more environmentally friendly ways to get around – like walking and cycling – to support national emission reduction goals.
i. Hulls Creek Bridge - A pedestrian/cyclist bridge was constructed over Hulls Creek, as a part of the popular Hutt River Trail. Over 500 native plants were planted and landscaping mahi completed.

Implementation of Toitu te Whenua

- In the 2021-31 LTP GW committed $8M of funding [2]to ramp up restoration of regional parks to fight climate change by removing livestock and actively restoring land to its natural state. The objective is to reduce annual emissions from grazing in Parks by 71 percent or 6,073 t CO2-e by 2031.
- Since July 2021 stock grazing has been reduced and nearly 400,000 natives have been planted across seven regional parks. To facilitate this we've also removed fences, built tracks and enhanced our nursery support.
- GW have worked with mana whenua and communities to plan and plant these areas.

[2] Funding was via the Low Carbon Emissions Fund, followed by rates from 25/26

Queen Elizabeth Park

- Stock grazing in QEP had already ended in 2020 and commercial horse grazing ended in 2022 when the grazing areas were found to be wetlands.
- This allowed full recreation access for everyone to enjoy the park, and for the natural processes of restoration to commence.
- Many people have reported that the speed of natural recovery has exceeded their expectations- nature has been very resilient.
- Wetlands are rapidly recovering.

Belmont

- Stock grazing ended in west Belmont Park in 2022 and native vegetation restoration works in progress.
- To ensure that plantings are successful, prior site preparations include spot spraying and controlling pest animals with night shooting of rabbits before and after plantings.

Baring Head/ Ōrua-pouanui

- Stock grazing ended at Baring Head/ Ōrua-pouanui in March 2023
- GW is progressing a planting strategy which includes pest control to support planting success rates, planting of fast growing and robust species, enrichment plantings improving fences to prevent incursion from neighbouring properties and planting of wetlands.

Climate impacts

- In 2022/23, stock and horse grazing in regional parks has been reduced to approximately 1,300 ha at Battle Hill, QEP, Belmont and Kaitoke.
- The park land area grazed has reduced by around 35%. This will reduce further as the large (approximate 1000 ha) commercial stock grazing licence in Belmont phases out prior to ending in January 2026
- We have improved our understanding of grazing practices and emission estimating. Emission factors per stock type have been changing and now include reporting on emissions from livestock waste in agricultural soils and manure management. Emission estimates also include application of fertiliser.
- Since 2018/19, through stock retirements and licence variations, overall emissions attributed to grazing in regional parks have almost halved (reduced by 46%). This reduction is making a significant contribution towards helping Greater Wellington meet our ‘carbon neutral by 2030’ goal.
- New restoration plantings maturing will sequester carbon and support the shift to climate positive. However, the types of plantings at any park and site are driven by original ecosystem species in part to optimise achievement of biodiversity goals. This means some restorative approaches and plantings, whilst contributing to carbon sequestration, may not be formerly accounted for. For example restoration of peatlands and wetlands.

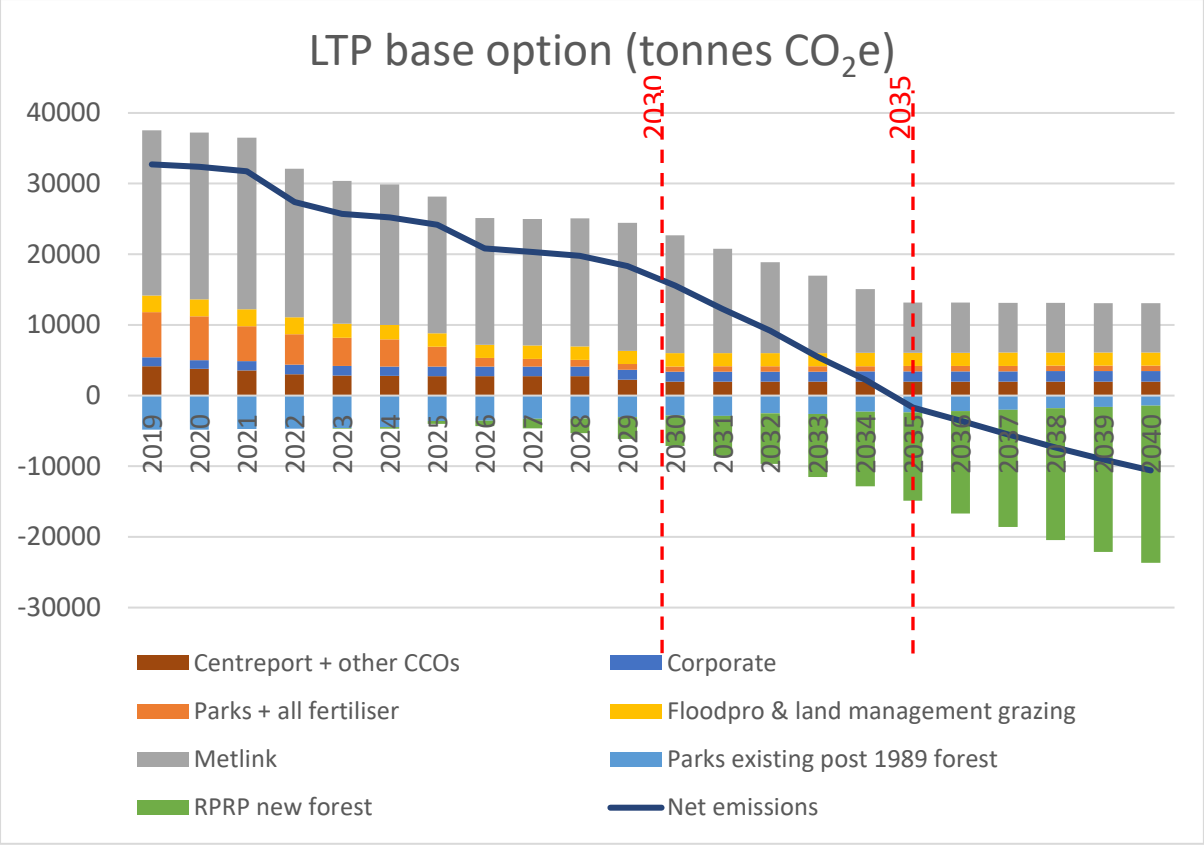

Figure: Emissions projects for GW and the role that our restoration plays in emissions in-sets. RPRP = Recloaking Papatuanuku Restoration Programme – grazing retirement and restoration mahi in Regional Park

Policy to delivery examples

Farm Environment Plans

- Farm environment plans were first considered for the region within the proposed Natural Resources Plan. We developed FEPs as a policy instrument in the NRP to address effects of agricultural land use intensification on water quality and ecosystem health, prioritising catchments with the highest need for intervention. The first areas to have FEPs in place will be the Waitawa and Parkvale catchments by end of 2023, followed by Otukura, Mangatarere, Waipoua catchments by 30 Sep 2024 and Kōpuaranga, Makakaha and Taueru catchments in 2025. The FEPs are required to be certified by accredited auditors to ensure effectiveness and consistency.
- When Freshwater Farm Plans (FWFPs) were set as national direction in 2022, our region was well set up to plan for the implementation of these regulations to be given effect here from 2024/25. Existing FEPs for a property will integrate efficiently with the FWFP. We've been supporting our farmers by providing information, facilitating the process of preparing their FEP and engaging with auditors to enable farmers to meet the time targets.
- Specifically, we've been delivering and engaging with our landowners quite closely on these regulations:
    - Our delivery and catchment teams have worked closely with the Parkvale Community Group to introduce the rules and develop a comms approach for the whole Parkvale community including emails to landowners, a billboard and flyers.

- We've held public meetings and drop in sessions in both the Parkvale and Waipoua priority catchments
- Developed the process for certifiers, including setting out qualifications, creating application forms, creating terms of agreement and establishing the process to become fully certified
- We've created a Farm Environment Plan template that helps our landowners to comply with this process
- We also provided a cash incentive for farmers to engage a certifier
- We have created a GIS tool to assist farmers in producing all the relevant maps they need for their farm plans
- Various comms have been completed and are still ongoing

Water Allocation Limits

- Through our whaitua processes and whaitua implementation programmes, we have set catchment specific water allocation limits. The allocation limits are then legislated through a plan change.
- Our Knowledge and Insights team have been monitoring and reporting on the water levels that help us to issue consents across water allocation. Based on the set limits, we may decline further consenting for that catchment.
- With our ICT team, we've now developed a spatial platform that visually shows these catchments, the set water take limits for these catchments, and helps us inform our consenting approach.
- Our delivery and regulation teams educate and engage with the communities at place to enable our uses to manage water use and allocation in these catchments.
- We are also working with our mana whenua and TAs to engage and look at solutions for areas where we have over-allocated or cannot allocate any further water takes.

Delivering the Government's Essential Freshwater Programme

- Across various national direction and national policy statements including the NPS-FM, the Natural Resources plan implements the Government's essential freshwater programme by setting out catchment priorities and/or regulatory requirements.
- Last year, 2022/23, GW delivered the largest grant-supported, on-the-ground action delivery programme in our history. Where each action, or completed environment restoration/biodiversity enhancement project was targeted to meet these regulatory and catchment priorities.
- There are many examples to land these regulations on-ground such as meeting erosion/sediment water quality limits, to stock exclusion and riparian improvements, to various biodiversity enhancements on private land.
- We have several individual projects, hundreds of thousands of trees planted, partnerships with communities developing catchment action plans, all involving an incentivised partnership delivery model where every $1 of GW funds is matched by at least $1 of private funds for good outcomes – in the order of a few $M across the region.
- Staff are planning on providing a more comprehensive summary for the next Environment Group update in November, as we wait for post-winter information to be complete.