Ngā Awa programme report

2022/2023

Now into its fifth year, the Ngā Awa programme continues to build and consolidate relationships with our mana whenua partners at-place through practical projects or shared governance structures.

As Ngā Awa matures, it becomes more and more apparent that each river is different and there is no 'one size fits all' approach to river restoration. Three catchments now have collaborative plans to guide their work, built on a solid platform of engagement, whereas other catchments are taking time to build that framework.

Monitoring the difference in freshwater biodiversity made by our work is just beginning. The programme has, however, developed and used an engagement monitoring framework that demonstrates significant progress in many catchments.

The programme's strength lies in the local river rangers and their relationships with others. There are currently four catchments without a ranger, and it is hoped that this will be remedied in the next financial year.

Jobs for Nature (JFN) funding continues to directly contribute to habitat restoration work in the Waikanae, Whanganui, Taiari, Te Hoiere, Rakitata and Arahura catchments.

"**Inspiration, friendship, connection, whanaungatanga, manaakitanga** and **beautiful kai**. These were the stand-out themes from participants' feedback from the national hui hosted by Ōtākou Rūnanga. The experience reflected our commitment to work in co-design and shared leadership with our Treaty partners and has set us up for the next phase of the programme."

Maria Deutsch, senior engagement advisor

A programme highlight was the Ngā Awa National Hui, hosted by mana whenua at Ōtākou marae on Otago Peninsula in May 2023. *Photo: Sarah Wilcox*

Research highlights

Research priorities for the programme include climate change resilience, river geomorphology, socio-economic drivers and monitoring needs. Highlights this year were:

- Exploring the implications of climate change in the Taiari catchment.
- Running a workshop with the Upper Taiari Wai catchment group about land-use diversification. Resources to help other catchment groups were produced.
- Undertaking a geomorphology study on part of a subcatchment in Doubtless Bay. Results are informing how to manage stream bank erosion in riparian restoration work.
- Supporting further geomorphology studies in Te Hoiere and Waikanae catchments to inform better river management.
- Geomorphology work in several catchments supported their inclusion in a national research bid into how to allow rivers to move naturally.

Department of Conservation
Te Papa Atawhai

New Zealand Government

Highlights by river

Doubtless Bay: Awapoko, Oruru and Oruaiti

Hapū, nurseries, community groups and agencies came together in Doubtless Bay to share restoration work, and identify opportunities and challenges. *Photo: Maddy Jopling*

- **People:** This year a catchment group came together to explore how to restore the catchment's rivers. The group meets regularly and is chaired by mana whenua and led by the community. It represents all the agencies and a number of industries in the area. A series of workshops and priority actions have been planned or delivered by the group. Kaitiaki and hapū were also involved in co-designing our survey work.
- **Research:** Īnanga spawning surveys led to updated regional plans that reflect an extended spawning period in Northland compared to the rest of the country. A geomorphology report was used to inform regional policy and develop fencing and planting plans for Te Paatu ki Kauhanga. This research led to Doubtless Bay being included in a national river research bid.
- **Restoration:** Restoration is underway or complete at seven riparian, wetland and īnanga habitat sites on private land. Engagement and funding towards the supply of plants from nurseries in previous years ensured that eco-sourced native plants were available for this work.

Hōteo and Mahurangi

- **People:** We met regularly with Ngāti Manuhiri this year, discussing goals and opportunities to work together. One idea is the use of woven natural fibres as fish ladders. Ngā Awa has provided input into the large restoration projects underway in this area – Mahurangi East Land Restoration programme, Kaipara Moana Remediation programme, Forest Bridge Trust and Mountains to Sea Conservation Trust.
- **Research:** 26 structures in 2 Hōteo subcatchments were assessed for fish passage, despite a very wet summer with two cyclones. Baseline stream assessments were also carried out at 14 sites in the Mahurangi River catchment.
- **Restoration:** Hōteo gorge was a focus of restoration work this year. Ngā Awa supported fencing and planting on private and public land, with a goal to restore the entire riparian margin in this 6 kilometre-long reach.

Freshwater mussels depend on native migratory fish to complete their lifecycle. Their populations are therefore affected by structures that stop those fish moving freely in waterways. *Photo: DOC*

Waipoua

Kaitiaki from Te Roroa Environs team worked with DOC staff on annual ecological integrity monitoring in the catchment. *Photo: Andrew Kirk*

- **People**: Work with Te Iwi o Te Roroa operations team continued with Ngā Awa supporting the Te Toa Whenua restoration project. The annual summer monitoring built on previous years' work and was a positive joint effort.
- **Research:** Fish survey work was completed throughout the catchment. One focus was locating populations of shortjaw kōkopu in the upper catchment. Information from mapping the salt wedge in the lower catchment is helping predict spawning zones and supporting habitat restoration work.
- **Restoration**: Despite a very wet summer, significant wetlands in the upper catchment were fenced to keep cattle out. Fish ramps on the weir in the lower river were checked and repaired to made sure they were functioning well in different river flows.

Waikanae

- **People:** A highlight of the year was the Waikanae ki Uta ki Tai project governance group endorsing the action plan. The plan adopts a 'kaupapa framework' based on Ātiawa ki Whakarongotai kaitiakitanga plan and community input. The Waikanae JFN programme has trained more than 60 kaimahi (workers) who are actively working on restoration activities in the catchment.
- **Research:** Further geomorphological research was completed on how to manage sediment and enable the river to 'breathe'. This is intended to help address flooding and other impacts of climate change on the community. A literature review of biodiversity work in the catchment was also completed.
- **Restoration:** Waikanae JFN led work in the estuary, riparian management, sustainable land management and animal and plant pest management, as well as developing a new native plant nursery.

Waikanae JFN kaimahi and DOC staff monitoring the tributaries in the catchment. *Photo: Ashley Alberto*

Waimatuku

- **Research**: An eDNA survey in the Waimatuku River has been planned to improve baseline information about freshwater species in the catchment.

Whanganui

- **People:** Working with Ngāti Hāua awa kaitiaki was a highlight this year. Together we carried out an ecological stream health assessment at 11 sites in the upper catchment. A training workshop covering piharau (lamprey) monitoring methods was also held.
- **Research:** An engineering report assessed the potential for improving īnanga spawning habitat in the lower river. The first year of re-surveyed invertebrate sites found a decline in ecological health since the late 1990s.
- **Restoration:** Ngā Awa continued to work with regional and district councils on riparian restoration projects.

Hapū representatives joined the Ngā Awa team and river engineer Gary Williams to assess potential improvements to īnanga spawning habitat. *Photo: Jane Taylor*

Lower Waitaki

- **People:** We continued discussions with Te Rūnaka o Moeraki and Te Rūnanga o Waihao about how to best work together to progress aspirations of the three rūnaka (Moeraki, Waihao and Arowhenua) for this river.

Te Hoiere / Pelorus

Ngā Toki Kaiahuone restoration crew in action at Ruapaka Wetland. *Photo: Melissa Banks, Ngāti Kuia*

- **People**: A local ecologist was contracted to create five farm biodiversity plans. Some farms contain remnants of near-original or old growth forest where livestock exclusion is a priority. The plans highlighted the pressing need for livestock management around waterways and wetlands. Recommendations also included exclusion, enhancement, restoration planting and maintenance. This assistance was welcomed by the catchment landowners. Exploring funding options to support additional farm biodiversity plans is already underway.
- **Research**: Ngā Awa supported geomorphology research in the catchment in partnership with Marlborough District Council.
- **Restoration:** Ruapaka Wetland is a 14 ha site beside State Highway 6, with significant cultural and ecological values. A restoration project, led by mana whenua, has killed and removed large numbers of willow trees to make room for new native plants. Ngā Awa contributed to this work, with contributions from the Ministry for the Environment, Fonterra and JFN. Ngā Awa also supported the collection of eco-sourced seeds for restoration planting in the Te Hoiere catchment.

Rakitata

> **People:** Completing the draft Ko te Whakahaumanu o te Rakitata Awa Revival Strategy ahead of public consultation was a highlight this year. In partnership with Environment Canterbury communications material was developed, including a a clear engagement plan, videos and a community newsletter.

> **Research**: Through a Ngā Awa sponsored PhD programme with the Waterways Centre, mapping braided river substrate is enabling the development of a model to track the movement of sediment in the river.

> **Restoration:** Te Runaka o Arowhenua led a JFN project restoring īnaka spawning habitat in the lower reaches. Plant species with resilience to changing conditions due to sea-level rise were chosen. The Upper Rangitata Landcare Group's JFN project has planted more than 100,000 plants in 10 out of 11 high country stations in this area.

The final year of JFN funding is supporting Arowhenua Native Nursery to transition to a commercial model. *Photo: DOC*

Taiari

Whakawhānaukataka at Ōtākou marae. *Photo: Kaiwhakaahua Studio*

> **People:** A stocktake found that 44 different agencies or groups are working in the Taiari River catchment to protect and enhance the river. A whakawhānaukataka (informal networking event) at Ōtākou Marae brought the groups together to explore a common vision for the catchment. This was a highlight for the year.

> **Research:** Several pieces of work at Waipōuri wetlands are underway, informed by the Taiari catchment's climate resilience plan. Te Nukuroa o Matamata led salinity monitoring in the wetlands. Ngā Awa contracted a fine scale LiDAR survey to help understand the impacts of sea-level rise. Further baseline information was gathered in surveys of giant kōkopu habitats and a large kanakana (lamprey) survey of sub-catchments.

Waikawa

> **People:** This year we worked on riparian planting projects with Waikawa whānau, regional and district councils, the local community board, Thriving Southland and the Waikawa catchment group.

> **Restoration:** Permission from the Southland District Council enabled Ngā Awa to re-plant parcels of land that are classified as legal roads but are not formed roads. We also completed 4 riparian planting projects in the lower catchment and donated plants for projects on 13 farms in the middle to upper catchment.

New riparian planting beside the lower Waikawa River. *Photo: Fork & Spade*

Waihou

> **People**: The Puketi Forest Trust has been a conduit for discussions about future restoration work in the Waihou River catchment. Ngā Awa sponsored a trust trip to the Waipoua catchment to share ideas and learn from their restoration work from ‘maunga to moana’.

Puketi Forest Trust group learning from the experiences of mana whenua in the Waipoua River. *Photo: Maddy Jopling*