



# Ngā Awa river restoration programme

Annual report 2024/25

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## Introduction

A highlight of this year was the 3<sup>rd</sup> Ngā Awa national hui, held at Te Hora Marae in Te Hoiere catchment. Ngāti Kuia hosted 40 mana whenua partners and DOC staff from across the country. A day out enabled everyone to visit significant sites, have a tour of the native plant nursery and see the progress made in the catchment's large-scale restoration projects. Previous national hui have been held in Waikanae, hosted by Ātiawa ki Whakarongotai and on Otago Peninsula, hosted by Te Rūnaka o Ōtākau. Many partners and staff who came to Te Hora have been part of previous hui, so a sense of momentum and trust is building and connections with each other are becoming deeper and stronger.

Most Jobs for Nature projects were finishing during the year, with large-scale restoration projects in Te Hoiere, Waikanae, Rakitata and Whanganui catchments close to or completed and celebrated. River rangers have seen this as an opportunity to review programmes and pursue other funding streams.

Working in Treaty partnership and in collaboration with other agencies and organisations continues to be a stand-out feature of Ngā Awa. We co-funded the Te Hoiere project coordinator with Marlborough District Council and the Taiari coordinator with Otago Regional Council, who works from the Aukaha office in Dunedin. Despite changes at many levels, we are growing trusted relationships with those we work alongside.



Department of  
Conservation  
*Te Papa Atawhai*

**Te Kāwanatanga  
o Aotearoa**  
New Zealand Government



National hui participants, 2025. Photo: Sarah Wilcox, DOC

## Communication and engagement

We shared many stories about Ngā Awa with the public and within DOC during the year. The way we work at-place in Treaty partnership is the starting point for all our communications and engagement. River rangers and project coordinators have fronted news stories as well as championing our river restoration work in local interactions and community events.

Media stories included:

- Awhipapa wānanga in Whanganui covered with a video on Te Reo o Te Uru (Regional Māori News).
- Three Jobs for Nature projects showcased in the New Zealand Water Review industry magazine, DOC's Conservation Blog and social media channels.
- RNZ shared news of a new population of "cute" Gollum galaxias fish in Southland.
- Trail cam footage of rats eating shortjaw kōkopu eggs, and our subsequent pest control work in the Waipoua Forest was shared by the New Zealand Herald and RNZ.
- A Conservation Blog described revegetation mapping, research and treatment options in Doubtless Bay.

Five editions of the Te Hoiere Project newsletter and two editions of the Rakitata Revival community newsletter kept subscribers up to date with events, research and restoration work in the catchments. Intranet stories featured our cohort of new rangers and innovative engagement work.



Front page image: Ruihana Smith, Te Taihū cultural practitioner, recounts the Māori history of Motuweka (Havelock) to national hui participants. Behind him are our mana whenua partners from Northland, Southland and Canterbury. Photo: Sarah Wilcox, DOC

## Research highlights

- Light-trapping surveys in Doubtless Bay discovered three, possibly four caddisfly species that are new to science.
- Novel ground-based 3D LiDAR images of the Whangaripo subcatchment, Hōteō River, supported geomorphic research.
- eDNA sampling in Waikanae found new populations of brown mudfish and dwarf galaxias.
- Nature financing options for Te Hoiere were explored to sustainably fund catchment-scale river restoration.
- Moderate river flows (as opposed to floods) in the Rakitata River were shown to have a greater effect on sediment transport than previously realised.
- Scenario modelling in the Taiari River found that nearly all freshwater and brackish wetlands will be affected by a small sea-level rise.

## Highlights by river

### Doubtless Bay: Awapoko, Oruru and Oruaiti Rivers

#### People

Our mahi continues to grow and gather momentum as we work together for this kaupapa: Toka-tū, toka-ora, tokarau – enduring, thriving, abundant.

This year the Doubtless Bay Community Led Catchment Group, chaired by the hapū collective, focused on developing a restoration vision and tikanga in a series of wānanga, forming the foundations of the catchment plan. The group continues to grow in membership from industry, government agencies, nurseries and community members working together to restore Doubtless Bay.

#### Research

We continued working alongside the hapū to guide both landscape-scale and site-specific restoration. Additional field workshops with researchers from Forbes Ecology, AUT, DOC and the University of Auckland helped present case study options to the catchment group and local community at sites throughout Doubtless Bay.

Co-led stream health and taonga species surveys were ongoing and shaped restoration priorities. These include prioritising fish barriers, planting wetlands and stream margins, and maintaining rat trapping networks at known kākahi sites. We also drew on science and technical expertise as needed, including Pohe Environmental for adult macroinvertebrate light trapping surveys.

#### Restoration

We supported the Honeymoon Valley Landcare Trust to carry out drone mapping and targeted weed control at key hotspots. This helped manage weeds at a landscape-scale and reduce their spread downstream. This work protects native species and strengthens resilience to climate change.

We also funded plants for wetland and riparian restoration led by Ngāti Tara, Ārāma Nurseries and the Mountains to Sea Conservation Trust. Additional funding was secured to remove rubbish at Lake Ohia, reducing fire risk and preventing further weed invasion at this important biodiversity site.



Robert King hapū kaitiaki (left) and Maddy Jopling river ranger checking a dissolved oxygen logger at Takakuri Station.  
*Photo: Milly Farquhar, DOC*

## Waipoua River

### People

This year we focused on building strong, collaborative relationships among the people and groups who are involved with the river. We held wānanga to shape a guiding document for the Waipoua River, its whenua and tangata, and to assess the project design and progress. Central to the project's design was maximising community involvement and providing local employment.

We also worked closely with DOC's Ngā Ika e Heke freshwater rangers and Donovan Ecological Management on several projects including shortjaw kōkopu monitoring and predator control in the Okawawa Stream.



DOC staff and Te Roroa kaimahi setting whitebait nets downstream of the ford across the river. Photo: Fern Donovan, DOC

### Research

We surveyed a shortjaw kōkopu population at our monitoring site in the upper catchment and found 27 adults. Surveys in the lower river indicated that juvenile shortjaw kōkopu were migrating upstream later in spring than some other whitebait species.

We assisted Whitebait Connection with salt wedge surveys to learn more about patterns of inanga spawning. The design of our fish monitoring projects was also reviewed and adapted to ensure it is streamlined and sustainable.

### Restoration

We continued working on an appropriate fix for the fish passage issues caused by the ford across the lower river. Australasian Fish Passage Services recommended installing a partial width concrete cone as a more cost-effective alternative to replacing the ford with a bridge.

Alongside the Nathan whānau, we continued restoration work in the lower river. Eight thousand native plants from Te Toa Whenua Nursery were added to the riparian zone this year. Northland Regional Council partnered with us for this mahi, which included controlling pest plants and animals in the area.

## Hōteō and Mahurangi Rivers

### People

We supported two wānanga to upskill local tamariki and rangatahi in freshwater science and river restoration. The first was held at Te Aroha Pā Marae and Puatahi Marae, led by Auckland Council's Sustainable Schools team and Mountains to Sea Conservation Trust. A highlight was the presentation of a report commissioned by Ngā Awa, *Ka Mua, Ka Muri: Looking back to inform Te Awa Hōteō futures*, which will shape future restoration projects.

We also continued working with Forest Bridge Trust, Kaipara Moana Remediation, Auckland Council, Mountains to Sea Conservation Trust and others on collaborative restoration initiatives throughout the Hōteō.



Hōteō Gorge planting. Photo: Kim Wright, DOC

## Research

To inform our strategic approach, we carried out baseline investigations at several sites in the catchments. Ngā Awa provided an MSc scholarship for geomorphic studies in the Whangaripo subcatchment. Our research also assessed a wetland in the Matariki Forests block, completed pest surveys, mapped habitat for potential black mudfish sites, and prioritised and surveyed several sites for rare large galaxiids.

This year marked the completion of our 3-year Hōteō fish passage analysis with Whitebait Connection. The analysis report will inform Auckland Council's ongoing fish barrier remediation work.

## Restoration

We added a further 13,500 new plants to the Hōteō Gorge planting project and DOC staff maintained the site.

In the Mahurangi catchment, we continued a wetland restoration project at Satellite Station Road with Spark New Zealand, Auckland Council and Ngāti Manuhiri Settlement Trust through the Mahurangi East Land Restoration Project. Fencing, fish passage remediation and baseline monitoring was carried out this year.

## Whanganui River

### People

A highlight was our collaboration with Te Rūnanga o Tamaūpoko to address the sediment issues affecting Te Awa Tupua. We applied for and received financial support from the Ministry for the Environment's Access to Experts fund. A two-day wānanga called *Awhipapa* was held in November at Rānana Marae, bringing together whānau, hapū, landowners, researchers, land managers and community members. The event's success has enabled us to develop plans and implement strategies to reduce fine sediment across the catchment.



Confluence of the Tāngarākau and Whanganui Rivers showing increased sediment in the main river. *Photo: Thomas Nathan, DOC*

### Research

We completed stream health assessments in the Retaruke River with Ngāti Hāua Iwi Trust. A catchment-wide eDNA sampling project provided valuable insights into the distribution of freshwater species. Sediment modelling presented at *Awhipapa* helped us understand possible scenarios arising from climate change and different policy settings.

### Restoration

This year the Ngā Tāngata Tiaki o Whanganui Trust's Jobs for Nature project of \$7.85 million was completed. More than 440,000 plants were planted, close to 170 km of fencing was installed, and 160 ha was treated for weeds and 512 ha for pests. Ngā Awa supported the project from the start. It demonstrates what can be achieved by working together with whānau, hapū, iwi and local communities to facilitate real progress for the health and wellbeing of Te Awa Tupua.

## Waikanae River

### People

Our work to implement the river restoration plan with our partners in the Waikanae ki Uta ki Tai secretariat continued this year. We also engaged with Greater Wellington Regional Council on RMA processes, regional fish passage issues and restoration planting in the Maungakōtukutuku valley.

The programme supported our two Ātiawa ki Whakarongotai coordinators to attend the Ngā Awa national hui. This strengthened ties between us and enriched the gathering.

### Research

Research to inform future restoration included ecological surveys of aquatic weeds and īnanga spawning habitat. We identified five weed species and confirmed two īnanga spawning areas in Kōtuku Whenua, a wetland area near the estuary. Other spawning sites were found along the main riverbank. Habitat was assessed at a further seven potential spawning sites to provide a baseline for restoration plans.

New populations of brown mudfish and dwarf galaxias were discovered in eDNA surveys. eDNA was also used to evaluate possible sites to receive translocations of these fish to help increase the resilience of the species.

### Restoration

We assessed eight fish passage barriers in the catchment and installed temporary remediation at two of these sites. Catchment-wide weed control work continued and the programme raised and helped plant out more than 2,500 plants in Nīkau valley.

Ngā Awa supported the Waikanae Estuary Care Group by sourcing cocoa husks from the Whittaker's Chocolate factory to mulch their new plantings.

## Te Hoiere/Pelorus River

### People

Te Hoiere Project is centred around collaboration. One recent hui brought together representatives from Marlborough District Council, Ngāti Kuia, Rangitāne and the community, with special advisors from the Ministry for the Environment and DOC. We worked on goals and actions but also spent time celebrating and reflecting on what we've already achieved together.

While a significant part of the project's core funding comes from Ngā Awa, this year we sought additional funding to sustain and build on the significant restoration gains in the catchment.

### Research

We expanded our dataset of fish distribution by surveying 15 more sites. Previous kanakana



Aidan Mora-Teddy surveying hauhau (brown mudfish) in a Waikanae wetland. Photo: Miles Davitt, DOC



Local contractors, farmers and Te Hoiere catchment care coordinator celebrating the project's 200,000th plant going into the ground, June 2025. Photo: Rachel Russell

pheromone survey results were ground-truthed by successfully finding juvenile fish in the main Te Hoiere River. We also found new kākahi populations and planned future management for this species.

Research in Te Hoiere examined sustainable funding of catchment-scale river restoration. Options like regenerative tourism, biodiversity credits, and environmental impact bonds based on positive downstream effects on Pelorus Sound, could decrease our reliance on government grants.

With mana whenua, we developed a set of mātauranga Māori monitoring methods and an app for data collection and management.

## Restoration

A highlight this year was joining together to celebrate the opening of Ngā Tai Pūrua, the commercial native plant nursery at Tītiraukawa. The project also supported fish passage remediation at several sites, planted 35,000 natives, installed 15 km of wetland fencing and developed three on-farm biodiversity plans.

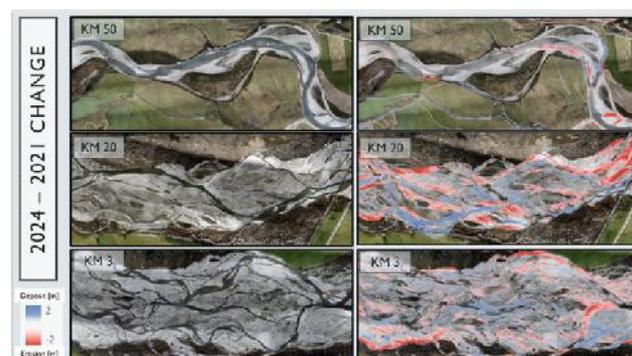
## Rakitata River

### People

The Rakitata Steering Group reached agreement on the updated Rakitata River revival strategy and made it available for final public comment. We also supported Te Rūnanga o Arowhenua to develop cultural assessment tools for values areas in their takiwā.

### Research

Ngā Awa sponsored Justin Rogers' PhD research, which found that moderate flows, as opposed to flood flows, have a greater effect on sediment transport patterns than previously realised. He developed a computer model to help water managers predict how different flow regimes change the composition of a riverbed and its habitat. Justin's work supports better decision-making around water takes, gravel management and flood control in braided rivers.



Mapping changes in deposition and erosion of the river substrate at several points upstream of the river mouth. *Image: Justin Rogers*

DOC's long-term river bird monitoring data was also analysed to inform our pest control programme.

## Restoration

This year we completed fencing at Black Mountain springs and restoration plans for Ealing Springs, and began a new project at Mt Peel Station. Further sites for restoration were identified in helicopter surveys and the last of the Jobs for Nature funding enabled us to plant 20,000 new plants throughout the catchment.

Our extensive predator control programme continued to service 1,800 traps to protect New Zealand's second largest freshwater bird breeding habitat. Each year tūturiwhatu (banded dotterel), ngutu pare (wrybill), tarapirohe (black-fronted terns) and other birds return to breed in the upper river.

## Taiari River Te Mana o Taiari

### People

Te Mana o Taiari held a workshop in Middlemarch with landowners, community members, forestry workers, and agency representatives. Invited speakers gave presentations and the group discussed water-related issues and drafted actions for the development of the Taiari Catchment Action Plan.

## Research

Commissioned research found that a large area of low-lying land in the Taiari Plains is highly vulnerable to sea-level rise. Scenario analyses showed that 1 m of sea-level rise would displace nearly all the existing wetland area. We are developing an adaptation strategy in response to these findings.

Previous Ngā Awa research forecast climate change to bring drier and warmer conditions in the upper parts of the catchment. This year we researched actions that could be taken now to mitigate these effects. Controlling woody weeds (willows and wilding pines) and invasive browsers had the highest cost-benefit scores.

Supported by a Ngā Awa scholarship, Karen Mayhew researched local Central Otago roundhead galaxias populations for an MSc thesis. The relationships with local landowners established through Ngā Awa were essential for enabling Karen to access her study sites on private land.



Willows requiring control in the Canadian Flats wetlands.  
Photo: Chris Kavazos, DOC

## Restoration

We contracted Te Nukuroa o Matamata to carry out 15 ha of invasive willow control to help prevent their spread into the scroll plain. Twelve automatic recording devices were installed in this area to monitor Australasian bittern/mātuku-hūrepo.

Year 2 of the catchment-scale biodiversity monitoring was completed, with data collected at 15 sites. This contributed to a large database of information about the baseline condition of the catchment.

## Waimatuku Stream

### People

Our biggest community event this year was a BioBlitz and outdoor learning day at the Waimatuku Stream mouth. More than 100 children plus teachers and parents from two local primary schools, as well as local farmers, enjoyed expert-led activities to learn about and record stream health, estuarine plants, birds, native fish and weeds. We appreciated the support of Thriving Southland, the Southern Institute of Technology and volunteers, many of whom had never visited the area before.



Children, parents and teachers learning about native fish at the BioBlitz in March 2025, Waimatuku Stream. Photo: Ini Gunn, Biolink Consulting

## Research

We installed data loggers in the lower reaches of the stream to gather data on salinity and water levels. The information will be used to map the saltwater wedge and refine Inanga spawning survey methods.

eDNA results led us to look for Gollum galaxias in a tributary of the Waimatuku and found a good number of juveniles – a new record for the species.

## Restoration

A local dairy farmer asked for our help to move a tributary fence back 5–7 m and replant the larger riparian zone. The farmer is also trialling Garto tree protectors, which are designed to reduce the care required after new plantings.