

Motueka Community Catchment Plan

A living framework for revitalising our rivers & deepening community connection and resilience

DRAFT FOR CONSULTATION

Executive Summary

Kia ora koutou,

This is a living, evolving plan for helping to create a thriving, resilient future for the Motueka River ($ng\bar{a}$ awa), people and communities ($ng\bar{a}$ tangata), and the land (te whenua).

This plan is shaped by the wisdom of the past, grounded in the present, and guided by dreams of the future. Within this plan is the story of connection - to the river; to the land; to the people. The story of people who live, love, and labour, getting their hands dirty and their boots muddy, and their bodies and minds restored in and around the awa.

Vision

Originating in the mountainous Maungarakau / Red Hills, the Motueka River grows to majestic proportions as it journeys toward Te Tai-o-Aorere / Tasman Bay. This beautiful, powerful force—woven with tributaries, wetlands, and unseen flows of groundwater—shapes the rhythms of life for all who dwell beside it.

Yet its vitality is not guaranteed. The river and the communities it sustains face pressures—some visible, some quietly unfolding.

The vision for the future of the Motueka Catchment is one of sustainable, thoughtful, environmentally sound practice, by commercial and non-commercial land users. Everybody, every hand, every piece of land, and every stream, contributes to the well-being of the living legacy that is the Motueka Awa.

About the Plan

The plan is rooted in the Motueka Catchment Collective (MCC) Values of Stewardship/Kaitiakitanga, resilience and inclusivity and builds on the collaborative efforts of those who came before, blending science with Matauranga Maori, united by a shared commitment to caring and restoring the Awa and environs.

Signed Debbie Win, Dayveen Stephens

Co Chairs – MCC Steering Group

QUALITY INFORMATION

Reference: Carter D. (2025) Motueka Catchment Community Plan. Motueka

Catchment Collective.

Date: September 2025

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Ātiawa)

Along with other members of MCC thematic groups, the MCC

Steering Group

Version No. 1.0

The Motueka Catchment Collective wish to acknowledge the Ministry for Primary Industries for funding the development of this integrated catchment plan through the Essential Freshwater Fund.

Ministry for Primary Industries Manatū Ahu Matua



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1. About the Plan

1.1 Purpose of the plan

This plan offers a living framework for a resilient future for the Motueka River and its communities, guided by ki uta ki tai—from mountains to sea. It responds to growing challenges like climate extremes, sedimentation, flooding, and habitat loss, recognising that lasting solutions require a shared, catchment-wide approach led by communities. It builds on what's working and helps us do more—together.

The plan guides the Motueka Catchment Collective and local partners with a practical, inclusive structure to align efforts, scale impact, and protect what matters most.

1.2 How This Plan Can Be Used

This plan is designed to be used—not just read. It is a guide for those actively involved in looking after the Motueka Catchment as outlined below.

Audience	How They Can Use the Plan
MCC (Steering Group, thematic groups, sub-catchment leads)	 Align local actions with catchment-wide goals Prioritise restoration efforts Guide work and track progress
Partner Organisations Iwi, TET: Tasman Environmental Trust, TBG: Tasman Bag Guardians, NZLT: New Zealand Landcare Trust, TDC: Tasman District Council	 Understand MCC and community priorities Identify opportunities to work together Align regional planning and funding with community-led restoration
Funders and Supporters	 Assess the rationale and impact of MCC's work Identify investment opportunities

Audience	How They Can Use the Plan	
	Support community-led restoration and resilience	
Community Members	Understand the MCC's long-term visionExplore opportunities to get involved	

1.3 What This Plan Is Not

This plan is not a comprehensive plan for the whole catchment. It's not a regulatory document, nor does it represent council policy or iwi-led planning. Instead, this plan reflects the scope and kaupapa of the MCC and expands MCC's aspirations into the future. It's shaped by those who have had involvement in the MCC.

1.4 How the Plan Was Developed

Ehara taku toa i te toa takitahi, engari he toa takitini. My strength is not that of a single warrior, but that of many.

This plan reflects years of shared effort — shaped by workshops, hui in community halls, and conversations across the catchment. It brings together the knowledge and mahi of landowners, iwi, researchers, and community groups, all committed to the wellbeing of the Motueka Catchment.

It is guided by an internationally recognised framework, adapted for local context. Key foundations include:

- Support from the Kotahitanga mō te Taiao Alliance, integration of Motueka's Integrated Catchment Management programme insights, and recent research and monitoring findings.
- Incorporation of the <u>2023 Community Survey Results</u> and feedback from community workshops, hui, and informal k\u00f6rero to guide priorities
- Guidance from MCC's Steering Group, and comprehensive input from MCC's six thematic groups to develop actions.
- A core working group of MCC members and partners who pulled all this work together.

The plan will continue to evolve as we learn and adapt together.

1.5 Mana whenua partners

The Motueka Catchment lies within the rohe of several iwi who hold mana whenua status and act as kaitiaki of the awa and surrounding landscapes. MCC has been lucky to have been supported by these iwi partners including Ngāti Rārua, Te Ātiawa o Te Waka-a-Māui, and Ngāti Tama. Ngāti Apa ki te Rā Tō has also supported MCC.







Representatives from these iwi sit on MCC's Steering Group, and MCC is on a learning journey towards respectfully including iwi perspectives, values and priorities in its processes and actions.

1.6 Other Plan Partners

While this plan is intended to primarily guide the ongoing mahi of the MCC community, it has been supported by a wide network of partners who will be essential to how effectively the goals of the plan can be achieved.

Partner	Role
Ministry for Primary Industries (MPI) and Ministry for the Environment (MfE)	Funders
Tasman Environmental Trust (TET)	Funding administration, coordination, and partnerships
NZ Landcare Trust (NZLT)	Technical support, landowner engagement and event coordination
Tasman Bay Guardians (TBG)	Support for community based freshwater monitoring, youth education and engagement, and river events
Tasman District Council (TDC)	Technical support, data, funding, and alignment with regional policy

Partner	Role
Science partners (NIWA ¹ , Manaaki Whenua – Landcare Research, and Cawthron Institute)	Science advice, research findings, technical input.
Fish & Game (F&G) and other agencies	Trap building, support at events, technical input
Local community groups	Sub-catchment teams, nurseries, and trapping networks and other community groups

¹ NIWA National Institute of Water and Atmospheric Research

2. The Motueka Catchment Collective

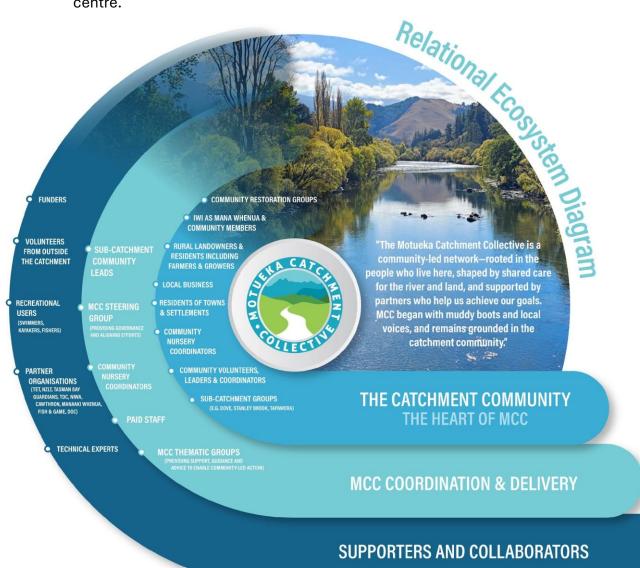
2.1 Who is the Motueka Catchment Collective?

The MCC is a community-led network shaped by the people who live and work in the catchment—especially rural landowners, residents, and volunteers. MCC began with grassroots energy and local conversations, and while partners provide valuable support, it is the community that defines the kaupapa, sets priorities, and leads the way.

Many involved wear multiple hats and move between roles—farmers, professionals, advocates, and more. MCC is not a single voice, but a chorus of lived experience, values, and priorities. This diversity fosters connection and shared purpose, but also calls for care, clarity, and honest conversation.

MCC exists to weave together local knowledge, lived experience, and technical insight to protect and restore the catchment for generations to come.

The diagram below shows the many voices of MCC, with the community at the centre.



2.2 What We Care About

MCC was formed from a desire to protect this place we call home, even as we face complex challenges to its health and resilience. Our vision is intergenerational: to be good ancestors, leaving a legacy that enables future generations to thrive.

The catchment is a living system, and our wellbeing is woven into its rivers, wetlands, forests, aquifers, and estuaries. It's also shaped by the people who care for it—mana whenua, landowners, residents, and volunteers. The photos and description below reflects what our community values most.



√ The Motueka Awa – Our Lifeblood

The Motueka River system connects mountains to the sea. It's nationally significant and locally cherished—central to recreation, identity, and wellbeing.

"It's great for swimming in, fishing from, kayaking along, walking and biking beside. By doing these things we also feel a sense of connection to it." — 2023 Community Survey.

"Our stream is a part of daily life, not just a water source."

For mana whenua, the Motueka Awa holds deep ancestral significance. The following statement from iwi partners outlines this enduring relationship:

The significance of the Motueka River to manawhenua

A number of iwi hold manawhenua status over the Motueka River and catchment. These include Ngāti Tama, Ngāti Rārua and Te Ātiawa. Statements from these iwi below indicate the significance of the Motueka River to each iwi.

Ngāti Tama

For whānau of Ngāti Tama the Motueka Awa was a place we used to exercise our values and upholding these values are paramount for our identity and connection. Ngāti Tama have steeped history in and around the Motueka Awa and its tributaries and as Kaitiaki, Ngāti Tama exercises this responsibility through ensuring the Awa and its tributaries are protected now and for the future. Our values are based firstly on;

- Whakapapa Our identity and connection to the Motueka Awa
- Mahinga Kai Our whānau knowledge and values associated with customary food-gathering areas
- Manaakitanga Hospitality and Respect
- Kaitiakitanga Exercising our responsibility to restore, protect and maintain our environment

Ngāti Rārua

The Motueka River is central to the lives of Ngāti Rārua whānau, who have lived in the catchment since the early 1830s.

For the original Ngāti Rārua families, the Motueka River was the source of life. The water channels, swamps and wooded areas associated with the river were habitats supporting a huge food basket. Oral traditions identify the Motueka River and flood plain as an extensive and bountiful mahinga kai from which to gather a huge variety of natural resources. Floods would replenish and fertilise the catchment, enabling iwi to cultivate food.

Traditionally, the Motueka River and its tributaries were full of tuna, kōkopu and īnanga. Tuna formed an important part of the customary diet. Upokororo, named after the grayling, was an important tribal area where tūpuna harvested eels. The gathering and processing of tuna was a customary practice that strengthened the kinship of iwi and whānau. Customary management practices followed the lifecycle of the tuna, and harvesting was regulated according to the seasons. The blue duck or whio was common on the faster flowing waters. Ngā manu were not only important as a source of food but were also valued for their plumage, which was used for decorative purposes. One major birding site was located up the Motueka River at Upokororo.

The Motueka River Valley provided a natural inland pathway to reach Te Tai Poutini. This pathway was a traditional greenstone trail, used by tūpuna in search of this valuable taonga and other items for trade. The route followed the Motueka River Valley, before connecting with the Wairau and Waimeha/Wai-iti routes, ahead of Lakes Rotoiti and Rotoroa. Waka were used to negotiate the waterways, therefore the Motueka River has many traditional tauranga waka (landing sites) and camps sites, which were used for fishing along its banks.

The significance of the Motueka River to Ngāti Rārua is illustrated in the carvings in the main whare at Te Āwhina Marae in Motueka. The river is also recognised in the pepeha of Motueka whānau, "Ko Motueka te awa, Ngāti Rārua te iwi...".

Te Ātiawa

Ko Motueka te awa, Ko Te Ātiawa o Te Waka-a-Māui te Iwi

For Te Ātiawa o Te Waka-a-Māui the Motueka River is an Awa Tupuna. Te Ātiawa o Te Waka-a-Māui ancestral ties bind us to one another and to our ancestor - the Motueka River. Te Ātiawa o Te Waka-a-Māui has mana, whakapapa and history within the Motueka River and its tributaries. Te Ātiawa o Te Waka-a-Māui has kaitiaki responsibilities for the Motueka River and its tributaries.

The Motueka River is part of a complex framework connecting all levels of our identity as an iwi. Our landscape defines us and our customary use of traditional resources is the context in which we most often engage with the natural world, thus providing for the transmission of intergenerational knowledge and the maintenance of identity. Our tikanga is the manifestation of our responsibilities and interests, including access and use, water quality, regulation of prohibited behaviours and maintenance of activities, sacred sites, ceremonies and rituals.

The health of the Motueka River is integral to our health and cultural identity. The health and the mauri of the River, derives from the need for flowing water from the head of the River and its tributaries to the point where it meets the sea. Te Ātiawa o Te Waka-a-Māui tūpuna had an intimate knowledge of navigation, river routes, and landing places, and the locations of food and other resources on and around the Motueka River. The relationship Te Ātiawa o Te Waka-a-Māui has with the Motueka taonga is central to Te Ātiawa o Te Waka-a-Māui identity and our cultural and spiritual wellbeing.

✓ Wetlands – Quiet Guardians of Water Health

Often overlooked, wetlands quietly shape catchment health—filtering water, buffering floods, and supporting biodiversity.

"Our wetland is a key feature of our water ecosystem. Restoring it will hopefully mean that the bird and aquatic life across our property will improve over time." — Landowner, Dovedale

√ Aquifers – Hidden but Essential

Aquifers store and supply freshwater, sustain stream baseflows, and buffer seasonal extremes. Their protection is vital.

"We rely on bore water and want to make sure it stays clean and available." — Grower, Motueka Plains

√ Native Forests & Fauna – taonga of the Catchment

From Kahurangi National Park to lowland bush remnants, native forests shelter birds, hold cultural significance, and signal what needs protecting.

"We planted natives around our wet patch—now the tūī and pīwakawaka are back." — Lifestyle block owner

✓ Estuaries – Where River Meets Sea

The Motueka and Riwaka deltas pulse with life. These intertidal zones support fish nurseries, bird feeding grounds, and coastal connection.

"The estuary is where we walk the dog, watch the birds and see the sun rise. It's peaceful." — Resident, Motueka

✓ Mana Whenua – Ancestral Connection and Kaitiakitanga

Te Atiawa, Ngāti Rārua, and Ngāti Tama hold enduring ties to the awa and whenua. Their leadership, mātauranga, and stewardship are central to catchment wellbeing.

√ Local Communities – People at the Centre

Over 20,000 people live across the catchment—from long-established families in Stanley Brook and Tadmor to orchardists in Riwaka and newcomers in Motueka township. Their wellbeing is central to MCC's vision.

✓ Rural Landowners – Stewards of the Land

Farmers, foresters, horticulturalists, and lifestyle block owners steward large portions of the catchment. Their practical knowledge and long-term care are essential to catchment health.

These aspects reflect what matters most to our community—and they shape the vision, values, and objectives that guide MCC's work.

2.3 MCC's guiding framework



2.4 MCC's Role in the Catchment

MCC enables restoration, connection, and resilience across the catchment. It doesn't deliver every action—but it helps guide strategy, build partnerships, and support community-led care. Its core functions are:

- Strategic Coordination & Governance Aligning priorities, guiding delivery, and maintaining inclusive governance
- Capacity Building & Knowledge Sharing Strengthening community capability through training, tools, and peer learning

- Monitoring, Data & Adaptive Action Supporting community-based monitoring and linking data to restoration and planning
- Engagement, Dialogue & Visibility Fostering connection, awareness, and shared purpose across the catchment
- Partnership & Collaboration Working with iwi, council, researchers, and community groups to deliver shared goals

2.5. MCC Progress and achievements

Over the past three years, with generous funding from the Ministry for Primary Industries (MPI), MCC has supported and worked alongside the catchment community to advance restoration, connection, and care. This has included:

- hosting hui and practical workshops
- building a volunteer network
- supporting landowners to restore their land
- beginning to set up a catchment trapping network; and
- motivating and supporting local communities to monitor their local stream.

These efforts show that we're not starting from scratch—we're building on momentum.

The infographic below highlights some of MCC's achievements to date, and the community catchment stories illustrate these metrics in a more grounded way. Many more stories can be found on MCC's website -

https://motuekacatchment.org.nz/allnews/.

PROGRESS & ACHIEVEMENTS 2022 - 2025

Engagement



128

Meetings & Events (to end July 25)



1278

Attendee numbers at hui



7

Weeding bees



4110

Volunteer hours



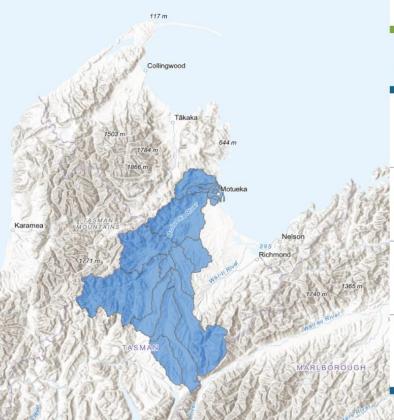
6

Schools and community groups involved



4

Active sub-catchment groups



Action



100K+

Trees planted in 3 years



147

Traps given out



3

Community nurseries



3

Wetlands created



10

Freshwater monitoring groups



600

Meters of fencing provided

Organisation



6

Thematic working groups



22

Newsletters sent: 99 stories



9

Steering Group members

Including 3 iwi representatives - Ngāti Tama, Te Atiawa, Ngāti Rārua.



\$897K

Funding over the 3 year period

Map: www.arcgis.com

Community catchment stories

Here are just a few glimpses into the people and places shaping restoration in the Motueka catchment.

Growing sub-catchment action in the Dove

Bill thought he would have a go at growing natives in his backyard to provide a legacy. Local generational farmer Debbie attended a Beef & Lamb Workshop on water monitoring and catchment groups and was inspired.

Debbie asked other farmers and lifestyle property owners if they want to have a Dove sub catchment. "Yes, we are interested", they said, "BUT no meetings".

Bill now propagates thousands of eco-sourced natives to distribute to locals. Debbie and her neighbour Winnie now monitor the stream that runs through their properties (photo below), and Winnie works with others to monitor the Dove River too.

Debbie and Winnie are planting natives, are avid trappers, work hard to combat invasive weeds, and are both looking to enhance and develop their wetlands. Neighbours are working on their own restoration plans and are keen to hear water-monitoring results. See the Dove catchment journey in the appendix.





Farming with nature in Tadmor

Jo Leyland, a farmer in Tapawera, recruited many to join the Upper Mouteka Catchment Group after attending the same workshop as Debbie. Kate and Susan (photos below) were part of this, and they went on to set up a propagators group and Susan developed her own nursery and carried out considerable planting and fencing on her farm.





There are many more stories on the Motueka Catchment Collective website, from putting in new picnic tables along the river, to setting up a community trapping network, and inspiring stories of individuals and groups doing their bit.

3. Natural and physical features of the catchment

The Motueka Catchment is one of Aotearoa's most ecologically diverse river systems. The catchment spans roughly 2,200 km² stretching from its headwaters in the Maungakura / Red Hills, majestic Kahurangi Mountains in the west to the Spooners Range, Richmond Ranges, and Moutere Hills in the east. Ranging from alpine heights to the estuarine margins of Te Tai-o-Aorere / Tasman Bay.

The following section summarises distinctive natural and physical features of the catchment — from geology and climate to tributaries and land use.

The Motueka Integrated Catchment Management (ICM) research programme

Between 2000 and 2011, the Motueka Catchment became a national and international exemplar of integrated science through the ICM programme, led by Landcare Research and Cawthron Institute. Recognising that land use, freshwater, and coastal processes are deeply interconnected, the programme applied a whole-of-catchment lens to explore how biophysical and social systems interact.

Key contributions included:

- Catchment-wide modelling of sediment, nutrients, and water flows
- Collaborative research with iwi, landowners, and community groups
- Integration of mātauranga Māori alongside western science
- Scenario planning and decision support tools for sustainable land and water use

The ICM programme laid the groundwork for many of the insights presented in this section. Its legacy continues through local initiatives like the Motueka Catchment Collective, which apply ICM principles in restoration, monitoring, and governance.

To access ICM information, go here - https://icm.landcareresearch.co.nz/

3.1. Catchment Form and Flow Patterns

The complexity of the Motueka catchment lies in the interplay between geology, soils, rainfall, and land use.

3.1.1 Geology, soils and topography

The Motueka Catchment is geologically diverse, with sharp transitions between ultramafic, granitic, sedimentary, and alluvial formations².

 Red Hills ultramafic rocks dominate the upper western headwaters, forming steep, sparsely vegetated ridgelines with slopes often exceeding 35%. High magnesium and heavy metal content also influences stream chemistry. These zones are erosion-prone and ecologically sensitive.

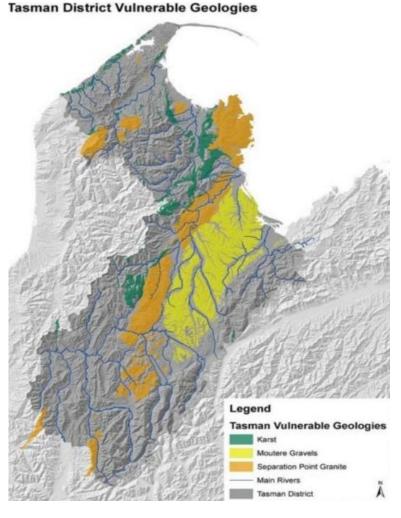
Separation Point Granite underlies much of the western hill country, especially around tributaries like the Baton and Pearse, and accounts for approximately 10–12% of the catchment's geology. These areas are steep and dissected, with slopes typically ranging from 20–30%. The fractured granite weathers into fine gravels and quartz-rich sands, which are mobilised during heavy rain and transported downstream. In lower-gradient reaches, stream beds are often dominated by sand and fine gravel deposits. While these sediments shape channel form, they do not typically produce braided riverbed structures. Instead, channels may exhibit wandering forms with mobile bars and occasional avulsions following high-flow events.

Soils on granitic and ultramafic terrain are shallow, stony, and low in fertility and are prone to runoff and overgrazing impacts.

- Moutere gravels cover around 35–40% of the Motueka Catchment, dominating the central basin across areas like Motupiko, Tadmor, and Tapawera. These gravels form rolling hill country with slopes of 10–20% and give rise to clay-bound soils that are compacted and slow to absorb water. Moutere gravels shed water due to low-permeability soils that limit infiltration, leading to surface runoff and erosion under pastoral and forestry land use.
- **Recent alluvium** underlies the lower Motueka plains, forming flat terraces with less than 5% slope. These fertile soils support intensive horticulture and urban development, but soils are vulnerable to compaction, nutrient leaching, and groundwater drawdown. Their gentle topography facilitates aquifer recharge and estuarine transition.

-

² ICM Catchment Atlas; TDC Technical Report, 2003



Fuller, Basher & Hicks (2014) and other studies have found that erosion risk is highest in steep pastoral zones and post-harvest forestry blocks, especially on granite and gravelderived soils. See the map opposite.

Together, these geological—topographic zones explain much of the catchment's hydrological diversity. Restoration and monitoring strategies must reflect these underlying physical drivers.

Vulnerable geologies of Tasman District, TDC

3.1.2 Hydrology and Flow Regimes

The Motueka River: Hydrological Integrity and Protection

The Motueka River is one of Aotearoa's most legally protected and comparatively hydrologically intact rivers, safeguarded under a Water Conservation Order (WCO) that recognises its outstanding ecological, cultural, and recreational values. The WCO prohibits damming and restricts activities that would alter natural flows or degrade water quality across the main stem and key tributaries.

Flowing 116 km from the Red Hills to Tasman Bay, the Motueka transitions from alpine headwaters to a dynamic estuarine delta. Its gravel-bed morphology,



Motueka River from Baton Bridge

riffle–pool sequences, and naturally low turbidity distinguish it from most lowland rivers in New Zealand.

Rainfall Patterns and Flow Variation

Rainfall across the catchment varies dramatically—from over 3,000 mm/year in the western ranges to less

than 1,000 mm/year near the coast. For context, New Zealand's national average is around 1,730 mm/year, placing the upper Motueka among the wettest zones in the country.

However, recent years have shown signs of reduced seasonal rainfall and longer dry spells, especially in mid and lower catchment zones—raising concerns about low flows, aquifer recharge, and climate resilience.

Flow Volumes and Seasonal Dynamics

The Motueka River's mean annual flow at Woodstock is approximately 20–22 m³/s, with monthly averages ranging from 10 m³/s in summer to over 30 m³/s during winter peaks. Flood events can exceed 200 m³/s, particularly following intense rainfall in the western ranges. These high flows shape gravel-bed morphology, drive sediment transport, and influence downstream habitat.

During extended dry periods, low flows can drop below 5 m³/s, especially in late summer and early autumn. These low flows can impact aquatic habitat, mahinga kai, and water allocation. Climate projections suggest increasing frequency of low-flow conditions, particularly in the mid and lower catchment zones, where aquifer recharge is limited and irrigation demand is high.

Runoff and Groundwater Interaction

The river's mean annual runoff—approximately 844 mm—represents the average depth of water that flows off the land into the river system each year. This is moderate by national standards, reflecting both high rainfall in the headwaters and significant infiltration and groundwater recharge in the mid and lower catchment.

In the lower Motueka Valley, groundwater–surface water interaction plays a critical role in sustaining baseflows during dry periods. Shallow aquifers contribute to river flow, particularly near the estuarine transition zone. These

interactions are vital for maintaining ecological connectivity and supporting cultural and recreational values.

Tributary Contributions and Catchment Complexity

This hydrological backbone is shaped and sustained by a network of tributaries—each with distinct geology, flow behaviour, and land use pressures. Some tributaries respond rapidly to rainfall due to steep terrain and shallow soils, while others contribute steady baseflow through groundwater recharge, particularly those in Separation Point geology. The following section outlines key tributaries and their contributions to the Motueka River system.



Motueka Catchment Tributary Zones – Geology, Hydrology and Sediment Overview

Tributary / Stream	Catchment Size (km²)	Geology & Relative Sediment Yield	Rainfall & Flow Characteristics
Motueka (main stem)	_	Mixed geology; integrates upstream sediment inputs	Variable flows; influenced by tributary peaks and aquifer-fed baseflows
Wangapeka	300	Separation Point Granite; High sediment yield due to steep, fractured terrain	2,500–3,000+ mm/year; rapid rise and fall; major contributor to flood peaks
Baton	150	Separation Point Granite; Moderate–High sediment yield	2,500–3,000+ mm/year; flashy flows; steep terrain
Pearse	~20	Karst limestone; Low sediment yield; spring-fed clarity	2,500–3,000+ mm/year; stable flows; visually clear in floods
Graham	~50	Mixed geology; forested; Low–Moderate sediment yield	2,500–3,000+ mm/year; moderate slopes; relatively stable flows
Pokororo	~40	Mixed geology; Low sediment yield	2,500–3,000+ mm/year; often visually clear; limited sediment transport
Motupiko	~230	Moutere Gravels; Moderate sediment yield; prone to slippage	1,200–2,000 mm/year; moderate baseflows; episodic sediment pulses
Tadmor	~130	Moutere Gravels; Moderate sediment yield	1,200–2,000 mm/year; rolling hill country; sediment spikes during rain
Dove	_	Moutere Gravels; Moderate sediment yield	1,200–2,000 mm/year; similar to Tadmor; hillslope erosion in wet seasons
Stanley Brook	~60	Moutere Gravels; Moderate–High sediment yield	1,500–2,000 mm/year; flashy hydrograph; prone to bank erosion
Sherry	~100	Moutere Gravels; Moderate–High sediment yield	1,500–2,000 mm/year; high peak flows; erosion-prone margins
Waiwhero	~30	Alluvium and gravels; Low sediment yield	900–1,200 mm/year; low baseflows; modified stream network

Tributary / Stream	Catchment Size (km²)	Geology & Relative Sediment Yield	Rainfall & Flow Characteristics
Rainy	~25	Alluvium and gravels; Low sediment yield	900–1,200 mm/year; lowland stream; limited flushing capacity
Little Sydney	_	Alluvium; Low sediment yield	900–1,200 mm/year; modified flow regime; low sediment mobility
Orinoco	~35	Alluvium and gravels; Low sediment yield	900–1,200 mm/year; low baseflows; sediment retention in channel
Hinetai / Lower Motueka Valley springs	_	Aquifer-fed; Low sediment yield	1,000–1,200 mm/year; stable baseflows; vulnerable to drawdown
Motueka Sandspit / Estuarine Delta	_	Receives upstream sediment; Variable accumulation	Stable baseflows; sediment accumulation risk due to low flushing
Riuwaka	105	Karst and spring-fed systems; Low sediment yield	~2,000 mm/year; stable flows; low sediment transport

Why Sub-Catchment Scale Matters

While the Motueka Catchment is often described at the whole-of-catchment scale, real understanding emerges only at the sub-catchment level. Each tributary zone in the table above reflects a unique mix of geology, soil type, rainfall, and slope, which shapes how water moves, where sediment comes from, and how resilient each system is. Steep granitic headwaters shed gravel and sand quickly; clay-bound Moutere gravels limit infiltration and elevate runoff; lowland streams accumulate nutrients and sediment. These patterns aren't obvious until you zoom in—local mapping and monitoring are essential to reveal cause and effect.

The ICM programme showed that without this finer-grained lens, catchment-wide averages can mask what's really happening on the ground.

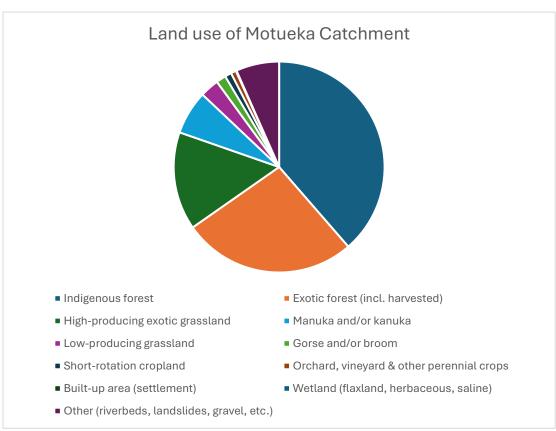
3.1.3 Land Use Patterns

The Motueka Catchment's land use is unusually diverse and spatially distinct, shaped by steep rainfall gradients, complex geology, and a long history of mixed land tenure.

Historical Context

Land use has shifted dramatically over the past 150 years. Early Māori settlement focused on river corridors and coastal zones for mahinga kai and access to pounamu. European colonisation brought widespread land clearance for grazing, followed by gold mining, tobacco farming, and eventually horticulture. Steep hill country was later converted to exotic forestry, while lowland plains became hubs for intensive production.

Land Use of the Motueka Catchment



Taken from LAWA Land Cover Dataset (2021), based on LCDB v5.0 reclassification by Manaaki Whenua – Landcare Research.

Land Use mosaic

The Motueka Catchment is a patchwork of land uses—from native forest in the Wangapeka to sheep farms in Tadmor and kiwifruit orchards in Riuwaka. Around 15% of the catchment is used for dairying, sheep and beef farming, and 2% for horticulture – vegetables, pipfruit, kiwifruit, and hops. Urban development is

concentrated around Motueka township, with smaller hubs like Tapawera, Ngātimoti, Brooklyn, and Riuwaka spread across the valleys.

Land use follows a clear spatial pattern shaped by geology, slope, and water availability:

- **Forestry** dominates steep hill country, especially on Separation Point granite. These erosion-prone zones respond quickly to rainfall and drive sediment loads.
- **Pastoral farming** is concentrated in mid-catchment valleys. Gravelly soils and seasonal flows challenge nutrient retention and bank stability.
- Horticulture clusters in the lower plains, supported by aquifer irrigation.
 These zones are productive but sensitive to runoff and groundwater drawdown.
- Indigenous forest buffers the upper catchment, supporting ecological integrity and long-term resilience. A significant portion of the catchment is either held in Kahurangi National Park, QEII Trust land or Richmond Forest Park.
- Lifestyle blocks are scattered across valley margins. Though small in area, they influence stream health through grazing, planting, and runoff.

3.2 Biodiversity, Freshwater Ecology, and Habitat Connectivity

The Motueka Catchment supports a wide range of native species and habitats—many of national significance. However, fragmentation, sedimentation, and altered flows now threaten the very systems that make the catchment unique.

3.2.1 Freshwater Fauna and Aquatic Systems

The Motueka Catchment supports a rich diversity of freshwater fauna, including 18 native fish species, confirmed through electric fishing, spotlighting, and eDNA sampling. These species reflect a range of ecological niches and sensitivities to flow, sediment, and habitat disturbance. Key species include:

- **Shortjaw kōkopu** (Galaxias postvectis) *Nationally Threatened*. Found in shaded, low-sediment tributaries with stable flow and intact riparian cover.
- Inanga (Galaxias maculatus) A key whitebait species. Spawning occurs in tidal reaches of the lower Motueka and Riuwaka, often in riparian grasses at the saltwater interface.

- Longfin eel (Anguilla dieffenbachii) and torrentfish (Cheimarrichthys fosteri) Widespread but vulnerable to flow alteration, sedimentation, and loss of channel complexity.
- **Kākahi** (Echyridella spp.) and **kōura** (Paranephrops spp.) Present in low-disturbance streams; populations decline where sedimentation and riparian degradation are high.
- Flathead galaxias (Galaxias depressiceps) and pouched lamprey
 (Geotria australis) Both listed as Nationally Vulnerable, requiring cool,
 clean water and migratory connectivity.
- Dwarf galaxias (Galaxias divergens) and giant kōkopu (Galaxias argenteus) – Regionally significant species, often found in spring-fed or forested reaches.
- Bluegill bully (Gobiomorphus hubbsi) Rare and sensitive to extended low-flow conditions, particularly in mid-catchment gravel-bed streams.

Recent modelling by TDC and Cawthron, validated through field sampling, confirms that streams flowing through Moutere gravel geology tend to have



Jacob Lucas with his son and brown trout

naturally lower MCI scores. This reflects the geology's influence on substrate composition, baseflow variability, and macroinvertebrate assemblages—not necessarily poor water quality.

Brown trout, while not a native freshwater fish, are highly valued in the Motueka River for recreational fishing.

3.2.2 Terrestrial Biodiversity and Vegetation Patterns

Vegetation across the catchment reflects its underlying geology and land use history:

- Beech-podocarp forest dominates the western ranges, supporting native birds, bats, lizards and invertebrates, and contributing to clean headwater flows.
- **Ultramafic-tolerant species** like Dracophyllum and alpine tussock persist in the Red Hills—rare communities adapted to magnesium-rich soils.
- **Lowland forest remnants** are fragmented and degraded, often confined to gullies and riparian strips, vulnerable to weeds, browsing, and edge effects.

- Riparian zones vary widely: eco-sourced natives stabilise banks in restoration areas, while Old Mans Beard, blackberry and willow dominate less-managed reaches.
- Wetlands, though covering less than 0.03 of the catchment (LAWA Land Cover Dataset (2021), provide critical habitat for waterfowl, amphibians, and aquatic plants—but many are fragmented or degraded.

3.2.3 Birdlife and Habitat Connectivity

The catchment's birdlife reflects its habitat diversity—and its vulnerabilities:



A pair of whio, photo credit: Farmers for Whio

- Whio (blue duck) in upper tributaries like Wangapeka and Baton—requiring clean, fast-flowing water and stable boulder beds. Their presence signals high ecological integrity.
- River-nesting birds like black-fronted tern, banded dotterel, South Island Pied Oystercatcher, and pied stilt rely on open gravel beds, now threatened by channelisation, vegetation

encroachment, and recreation.



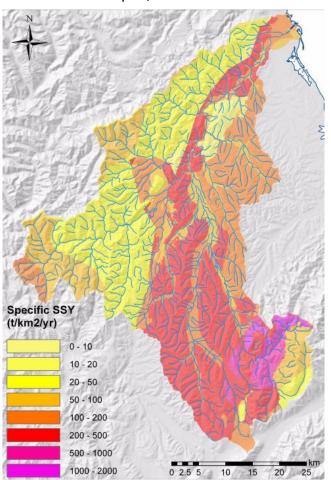
- **Forest birds** including tūī, bellbird, rifleman, and kārearea are common in the western ranges and regenerating bush but depend on forest connectivity and predator control.
- **Estuarine species** such as kotuku ngutupapa (royal spoonbill) and kuaka (bar-tailed godwit) feed and roost in the Motueka Estuary— particularly the sandspit, an ecologically rich zone shaped by upstream sediment and nutrient flows.

4. Challenges and opportunities for the health of the River and catchment

The Motueka Catchment is rich in natural treasures and shaped by generations of care. But even in a place with strong foundations, resilience is not guaranteed. This section outlines key pressures—based on local data, community observations, and scientific monitoring—and signals where collective action can make the greatest difference.

4.1 Slips, Sediment, and Erosion

Sediment remains one of the most persistent pressures on the Motueka Catchment's freshwater and coastal systems, driven by hillslope erosion, streambank collapse, and land disturbance linked to heavy rainfall, forest



harvesting, and land use change. These processes are especially active in areas underlain by Separation Point Granite and Moutere Gravels—geologies recognised for their high erosion potential. Multiple studies, including Basher & Hicks (2003), alongside recent LAWA data from TDC and NIWA monitoring, confirm consistently elevated sediment loads in these vulnerable subcatchments.

Impact: Sediment smothers streambeds, disrupts fish spawning, reduces habitat quality, and affects estuarine and coastal ecosystems.

Sediment exported from the Motueka River—especially

during floods—can extend over 180 km² into Tasman Bay, affecting shellfish beds, seagrass, and aquaculture viability.

• **Restoration journey**: While riparian planting and bank stabilisation are underway, efforts are fragmented. Strategic action must target high-yield areas, support good land management across forestry and farming, and

align restoration with land use drivers. This <u>interactive map</u> highlights where sediment loads are highest and where mitigation could deliver the greatest impact.

4.2 Nutrients in Our Water

While many parts of the Motueka River and its tributaries maintain high water quality, nitrate and phosphorus levels are trending upward in some streams indicating increasing pressure. This is most evident in pastoral zones, but also occurs in native and plantation forest catchments, where natural soil processes, atmospheric deposition, and legacy land use may contribute.

Young et al. (2005) found that nitrate concentrations were highest in pastoral streams, but also unexpectedly elevated in forested areas, suggesting complex nutrient pathways. More recent monitoring by Tasman District Council and LAWA confirms these patterns and highlights emerging nutrient hotspots.

- **Impact**: Algal blooms, reduced dissolved oxygen, and altered aquatic food webs.
- **Restoration journey**: Stock exclusion, farm planning, and riparian buffers are helping reduce runoff—with many landowners already taking action. Yet nutrient hotspots persist. Broader uptake of good practice and increased support are needed to restore water quality at scale.

You can explore current nutrient levels and trends across the catchment on LAWA's Motueka River monitoring dashboard.

4.3 Straightened Rivers, Lost Floodplains

Over time, many rivers have been straightened or armoured — especially in the Motueka, Riuwaka, Tadmor, and Motupiko. These changes reduce natural flow patterns and disconnect rivers from their floodplains. <u>Tasman District Council</u> (2011) documented significant loss of channel complexity and floodplain connectivity in the lower Motueka and Tapawera zones.

- **Impact**: Less habitat complexity, higher erosion risk, and thermal stress during low flows.
- Restoration: TDC is assessing meander pattern, riparian vegetation cover and cross section profiles of every reach in the district and prioritising enhancement work. This video shows TDC's fish passage project https://www.youtube.com/watch?v=tur8ttyg1N4. But few have been implemented. Catchment-wide strategies are needed to reconnect rivers with their floodplains and restore habitat complexity.

4.4 Drained Wetlands, Disconnected Systems

Over 90% of wetlands in the Motueka Catchment have been lost—especially in lowland zones. Many were drained for farming or development, leaving fragmented remnants with limited ecological function.

Research has documented widespread wetland loss across the Tasman District, significantly reducing natural flood buffering and habitat availability. More recent guidance from Tasman District Council confirms that while wetland extent has increased slightly since 2000—through rural subdivision requirements and community-led restoration—most historic wetlands remain degraded or disconnected.

- Impact: Reduced flood buffering, habitat loss, and declining biodiversity.
- **Restoration**: Wetland rehydration and reconnection projects are underway, supported by landowners, iwi, and community groups. Scaling up restoration is essential to rebuild biodiversity and buffer climate extremes—through both grassroots efforts and strategic support.

For practical guidance and current restoration efforts, see <u>Tasman District</u> <u>Council's wetland restoration page</u>.

4.5 Fragmented Forests

Lowland and riparian bush across the catchment has been largely cleared over generations, leaving only scattered remnants. While upland forests remain relatively intact, fragmentation continues in some areas — breaking up oncecontinuous habitats and weakening ecological function.

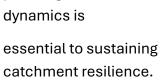
The Kotahitanga mō te Taiao Strategy (2019) notes that many lowland areas across Te Tauihu retain less than 1% of their original native vegetation cover, with fragmentation continuing to erode ecological integrity and connectivity. Research across Aotearoa and globally confirms that fragmented bush leads to cascading impacts on biodiversity, freshwater health, and catchment resilience.

- **Impact:** Stream degradation, biodiversity decline, disrupted ecological processes, soil instability, reduced climate resilience.
- Restoration: Thousands of natives have been planted across the catchment supported by nurseries and community partnerships. But lowland forest cover remains critically low. Considerable increases in replanting and corridor projects are needed to reconnect habitats, restore biodiversity, and stabilise soils.

4.6 Drying Streams and Thirsty Land

While the Motueka Catchment receives high rainfall overall, it is increasingly exposed to seasonal dry periods—especially in the lower plains and mid-catchment valleys. These zones rely on shallow aquifers and baseflow

contributions that are sensitive to drought and land use change. Hydrological modelling shows that exotic forestry and historic land cover both reduce low flows, with implications for irrigation, aquatic habitat, and estuarine health. Climate change is expected to amplify these patterns—bringing more intense rainfall events but also longer dry spells. Understanding and planning for low-flow





Aerial imagery, lowland Motueka catchment. Source MFE

Long dry spells are now affecting tributaries and aquifers across the catchment. Some streams dry seasonally, and shallow groundwater zones are struggling to recharge—a pattern becoming more entrenched with climate change. Thomas et al. (2005) showed that low flows significantly reduce habitat availability for native fish and macroinvertebrates and highlighted declining recharge rates in shallow aquifers. National modelling from the Deep South Challenge and MPI confirms that climate change is altering Aotearoa's hydrological cycle: increasing evapotranspiration, intensifying droughts, and reducing soil moisture and aquifer recharge.

As air temperatures rise, stream temperatures follow—stressing aquatic life, accelerating algal growth, and reducing dissolved oxygen. These thermal impacts are especially severe in unshaded lowland streams and shallow tributaries.

- **Impact**: Habitat fragmentation, thermal stress, native vegetation decline, increased fire risk, reduced recharge
- Restoration: Riparian shading, drought-resilient planting, and wetland expansion are helping buffer dry-season impacts. However, long-term resilience requires landscape-scale interventions, protection of recharge zones, and climate-adaptive land use planning.

4.7 Floods That Hit Hard

Floods are becoming more frequent and severe driven by intense rainfall, saturated soils, and constrained river channels. The June–July 2025 event was a stark reminder: the largest on record at Woodmans Bend, peaking at **2,785 m³/s**, overtopped stopbanks and caused widespread damage across the catchment. Civil Defence called it the worst flood in nearly 150 years (based on analysis by TDC's hydrology department).



Recent modelling from the
Climate Sigma report for the
Ministry for the Environment
suggests that Nelson and
Tasman are among the most
flood-exposed regions in
Aotearoa. National research
led by NIWA and Earth
Sciences New Zealand
confirms that extreme rainfall
events are likely to become
more frequent and more
intense as the climate warms.

These projections align with local experience. The June–July flood was not an anomaly—it was a signal.

• Impact: Sediment mobilisation, streambank collapse, habitat disruption,

infrastructure failure, and community hardship

• **Restoration**: Natural floodplain reconnection, riparian buffers, and adaptive land use planning are key to long-term resilience

4.8 Invasive Weeds and Predators

Invasive species are widespread across the catchment — including Old Man's Beard, blackberry, willow, and tradescantia in riparian zones, and possums, rats, and mustelids in forest remnants. These species suppress native



regeneration, degrade habitat quality, and threaten taonga species.

Old Man's Beard (Clematis vitalba) has been identified as one of New Zealand's most ecologically damaging weeds, particularly in forest remnants and riparian margins (West, 1992; Williams & Timmins, 2002). Predator monitoring by local groups and national programmes has also shown high possum and rat densities in fragmented bush,

requiring sustained control efforts (DOC, 2024; University of Otago, 2021; Manaaki Whenua, 2020).

- **Impact**: Loss of native vegetation, reduced nesting success, and ongoing pressure on restoration sites and farmland.
- Restoration: Weed control, predator trapping and pest control are active
 and increasing across the catchment led by community groups and
 landowners. But many areas remain untreated or reinfested. Coordinated,
 long-term programmes are needed to protect gains and restore ecological
 balance and protect livelihoods.

4.9 Water Extraction and Flow Stress

Water is extracted across the catchment for irrigation, stock water, and domestic use — particularly in summer months when flows are lowest. Shallow aquifers are also under pressure, with declining recharge and increased demand.

<u>Fenemor et al. (2011)</u> found that water allocation pressures in the Motueka Catchment were intensifying, especially in the plains and lower tributaries. Flow reductions were shown to affect fish habitat, water temperature, and cultural values.

- **Impact**: Reduced streamflow, thermal stress, habitat fragmentation, and loss of mahinga kai.
- **Restoration**: Improved water efficiency, recharge protection, and community-led flow restoration are needed to safeguard freshwater health.

4.10 Economic Pressures and Land Use Realities

Farmers across the catchment are navigating a complex landscape. Rising costs, shifting markets, and evolving regulations are creating real challenges — but they're also prompting innovation, collaboration, and a renewed focus on long-term resilience. Many landowners remain deeply committed to stewardship, even when margins are tight.

As Fenemor et al. (2003) observed, balancing production with restoration is never easy, especially under short-term financial pressure. Yet the Integrated Catchment Management (ICM) programme showed that when farmers are equipped with practical tools, flexible funding, and trusted relationships, restoration efforts flourish.

- **Current Constraints:** Limited capacity to invest in fencing, planting, or trialling new techniques, and uncertainty around compliance and funding can stall momentum.
- **Emerging Opportunities:** Nature-based enterprises and diversified land use, linking restoration to farm productivity, risk reduction, and offering of tailored, flexible, collaborative support programmes.

4.11 Stresses to community wellbeing and resilience

The Motueka Catchment is home to strong, diverse communities — from long-standing landowners and iwi partners to newcomers seeking connection with place.

Yet pressures are mounting. Climate-driven events like floods and droughts, alongside land turnover, rural isolation, and economic stress, are reshaping community dynamics. Participation in collective action is uneven, and some residents feel disconnected or overwhelmed by competing demands.

Recent national studies highlight how social cohesion, cultural identity, and access to trusted information underpin both community wellbeing and environmental resilience.

- Impact: Weakened informal networks and reduced shared care for place, burnout among volunteers and leaders, Lower participation in restoration and preparedness, reduced capacity for coordinated catchment response.
- **Restoration Potential:** Peer learning, community nurseries, and hands-on workshops can rebuild cohesion. Storytelling, local champions, and inclusive events help foster connection and collective action. Strengthening social infrastructure is essential to sustaining long-term catchment health.

4.12 Iwi Cultural Values and Participation

Despite deep ancestral ties to the Motueka Catchment, iwi face systemic barriers to meaningful participation. Planning frameworks often fail to reflect kaupapa Māori, limiting kaitiakitanga and cultural expression.

Te Mana o te Wai, while conceptually strong, has had limited practical impact in local decision-making and restoration delivery.

- Impact: These barriers reduce access to mahinga kai, weaken cultural identity, and perpetuate frustration with extractive approaches and tokenistic engagement.
- Restoration Potential: Where iwi lead their own restoration such as at the
 Whakarewa site supported by Ngāti Rārua Ātiawa Iwi Trust there is strong
 potential to restore native biodiversity, reconnect whenua and whānau, and
 demonstrate culturally grounded approaches. This applies to iwi led cultural
 health monitoring. Broader uptake depends on resourcing, governance
 reform, and genuine partnership.

4.13 Understanding Catchment Resilience

The challenges outlined above underscore the need for a shared, systems-based approach to resilience. The Catchment Resilience Framework offers a visual guide to this thinking. It places the living system at the centre, acknowledges the pressures that disrupt it, and highlights the role of community action in sustaining and restoring it.

CATCHMENT RESILIENCE FRAMEWORK



5. Vision for the Catchment in 2125

"When the river is well, people are well."

This long-term vision imagines a thriving Motueka Catchment—ecologically resilient, culturally grounded, and deeply cared for by its communities. The short vision is our compass; this is our map.

5.1 Ecological Resilience: Nature Thrives

The catchment functions as a connected, living system—absorbing, storing, and releasing water through restored rivers, wetlands, forests, and soils. A continuous corridor now stretches from mountains to sea.

Rivers & Streams flow naturally, buffered by wide riparian margins and shaded by native vegetation. Straightened reaches have been re-meandered, reconnecting floodplains and restoring flow variability. Sediment and nutrient loads are low, and rivers are clear and cool. Freshwater species like inanga, tuna, and koaro are abundant and self-sustaining.

Wetlands & Aquifers Over 300 hectares of wetlands have been restored across valley floors and seepage zones. These wetlands buffer floods, filter water, and recharge aquifers—sustaining baseflows even in dry seasons.

Native Forests & Fauna are reconnected across the landscape. Lowland forest cover has reached 15%, with mixed native planting tailored to slope, soil, and climate. Kererū, kākā, and Powelliphanta are thriving, with predator and weed pressures low due to sustained community-led control.

Estuaries & Coastlines are resilient and biodiverse. Saltmarshes buffer sediment and protect habitat. Shorebird populations are stable, and estuarine health is monitored through both scientific and cultural indicators.

5.2 Land Stewardship & Flood Preparedness

Land use supports both productivity and ecological health, shaped by those who know their whenua best.

Farmers, Foresters & Growers lead catchment care. Over 80% of productive landholdings are actively involved—through riparian planting, erosion control, and locally adapted practices. Sediment runoff from erosion-prone slopes has dropped by 40%.

Lifestyle & Urban Landowners contribute through backyard planting and trapping, stream care, and nature-based stormwater systems. River access is celebrated through signage, art, and storytelling.

Flood Resilience is built into land use and community practice. Reconnected floodplains, wetland buffers, and slope-sensitive planting reduce peak flows and sediment mobilisation. Community-led preparedness plans are active across all sub-catchments.

5.3 Community Connection: Restoration is a Shared Journey Restoration is visible, celebrated, and woven into daily life.

Sub-Catchment Groups are thriving hubs of local leadership, supported by toolkits, mentoring, and shared kaupapa.

Restoration action is widespread and normalised. Community nurseries supply eco-sourced plants, many locals, schools and landowners propagate their own natives, trap pests, and control weeds.

Freshwater monitoring is collaborative and transformative. Community and iwi-led monitoring is fully integrated with council data, enabling targeted restoration and adaptive management. The awa is not just healthy—it is known, understood, and deeply respected.

The awa is loved - it is a place to gather, swim, paddle, and reflect—a living presence in community life. Families visit their favourite swimming holes, children learn to fish and forage, and stories are shared along the banks. The awa is not just cared for—it is loved by many.

5.4 Cultural Leadership: Te Ao Māori Guides the Way

Te Mana o te Wai is embedded in freshwater decisions.

Iwi & Hapū lead cultural health monitoring and Te Mana o te Wai is upheld in decision making and action, led by mana whenua.

Marae are active partners in restoration and education and places are restored ecologically and spiritually reflecting whakapapa, wairua, and kaitiakitanga.

6. Strategy: Turning Vision into Action

The Motueka Catchment Plan turns long-term vision into practical action. It builds directly on the 2125 Vision — where rivers run clean, wetlands buffer floods, native forests reconnect, and communities lead with care and pride.

To get there, we focus on three interconnected strategic pathways. These respond to the pressures we face — sediment and temperature stress in our rivers, fragmented habitats, erosion-prone slopes, flood risk, and the need for stronger community connection and cultural leadership. Each pathway reflects the values of our communities, iwi, and landowners, and is shaped by both scientific knowledge and mātauranga Māori.

They are not isolated — they're woven together like flax in a kete, each reinforcing the others to create a resilient, thriving catchment. Together, they guide action across the landscape — from forests to farms, wetlands to waterways.

Shared Principles

All strategies are grounded in principles that reflect MCC's vision and values:

Build on what's working – Support and amplify existing community-led efforts

Stay flexible – Adapt through consultation and local input

Focus on outcomes – Prioritise ecological function, connectivity, and resilience

Support the willing – Work with landowners, schools, and groups ready to act

Celebrate and share – Use storytelling to build pride, momentum, and visibility

Integrated Approach to Recovery

Restoration is driven by a blend of grassroots energy and strategic coordination. Community-led efforts — like riparian planting, predator control, or stream monitoring — often spark wider projects that attract technical support and funding. Likewise, strategic interventions — such as sediment control, aquifer recharge, or floodplain reconnection — depend on local leadership to succeed. In practice, these approaches are deeply interwoven. Mapping, modelling, and prioritisation help guide effort, but it's the relationships and responsiveness on the ground that make restoration stick.

Many actions in this plan will be delivered through sub-catchment groups — where local knowledge, lived experience, and community leadership shape restoration priorities. MCC's next phase will focus on strengthening these groups, especially through flood resilience planning and freshwater monitoring.

At the same time, MCC continues to support individual landowners who prefer to restore their own land independently. Whether through quiet planting efforts, fencing waterways, or predator control, these contributions are vital to catchment health.

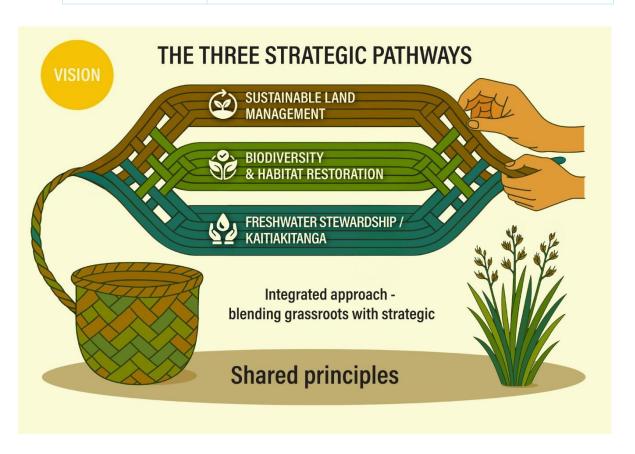
By enabling both grassroots action and strategic coordination — across subcatchments, individual properties, and partner networks — MCC ensures restoration remains grounded, inclusive, and effective across all three strategy areas.

Enabling Conditions for success

To deliver these strategies, eight enabling conditions help turn intent into action. They reflect shared values, and ensure long-term resilience across freshwater, biodiversity, and land management pathways. These pillars are woven throughout the strategy tables and implementation timeline.

Pillar	What Success Looks Like	
Inclusive Governance & pro- active coordination	 ✓ Cohesive, high functioning structure that supports plan delivery ✓ Co-governance structures in place ✓ Transparent roles and responsibilities ✓ Effective processes for decision making 	
Strong partnerships	✓ Collaboration with iwi, councils, researchers, and funders builds support and visibility, along with enabling a more strategic level response that prioritises efforts.	
An engaged and capable community	 ✓ Active sub-catchment groups ✓ Peer learning hubs ✓ Youth-led initiatives ✓ A strong volunteer network 	
Cultural values embedded and strong iwi leadership	 ✓ Cultural indicators in monitoring ✓ Iwi-led restoration projects ✓ Te Mana o te Wai reflected in planning ✓ mātauranga Māori and iwi leadership embedded across all strategy areas 	

Pillar	What Success Looks Like	
Integrate knowledge & Learning	 ✓ Integrated monitoring systems ✓ Shared learning platforms ✓ Annual review and refinement data, stories, and experience guide adaptive management 	
Economic resilience and innovation	 ✓ Nature-based enterprises and land-based livelihoods align environmental and economic outcomes. ✓ Pilots scaled across catchment ✓ Restoration visible in signage, art, and storytelling 	
Clear strategic focus	✓ Prioritisation tools, adaptive planning, and monitoring guide investment and learning	
Secure funding & Investment	 ✓ Nature-based enterprises trialled ✓ Catchment-wide funding strategy ✓ Long-term support for community-led and strategic restoration achieved ✓ Restoration-linked employment opportunities 	



6.1 Freshwater Stewardship Strategy



This strategy supports the catchment-wide vision for healthy rivers and connected freshwater systems. It responds to key pressures — elevated temperatures, sedimentation, flood risk, and habitat loss — and focuses on practical, community-led actions that restore ecological function and build resilience. It strongly connects with the other two strategic pathways of this plan.

We recognise that people engage with freshwater in different ways — for recreation, resource use, cultural practice, and care. MCC will work inclusively, supporting diverse perspectives and enabling action at multiple scales. Whether through riparian planting, wetland creation, monitoring, flood preparedness, or storytelling, we aim to bring communities along — building shared ownership, trust, and long-term resilience.

Delivery is supported by MCC's enabling conditions — including strong partnerships, inclusive governance, seeking funding pathway, and integrated learning systems.

MCC's three-year priorities are outlined below. Over time and with increased capacity and funding, the strategy will guide coordinated action across land uses and sub-catchments to strongly contribute to freshwater health outcomes — using practical tools, partnerships, and adaptive planning to support both group and individual restoration. The long-term goal is a freshwater system that sustains life, absorbs shocks, and reflects deep respect for the awa.

MCC's Focus: 2025-2027

Focus Area	Strategic Emphasis
MCC group review	Assess current thematic group structure and delivery approach and adjust to suit new priorities.
Freshwater Monitoring	Support, strengthen, and connect existing monitoring groups, and expand monitoring groups if capacity, in collaboration with TBG. Support iwi-led cultural health monitoring.
Sub-Catchment and community engagement	Increase engagement with the community and subcatchments through hui, workshops, storytelling, and provide support for determining local priorities.

Focus Area	Strategic Emphasis	
Flood Resilience planning	Lead the development of community flood resilience planning through workshops and action planning, in collaboration with stakeholders.	

Freshwater Monitoring

MCC's Freshwater Monitoring Group (FMG) enables community based freshwater monitoring across the catchment. It does this by acting as a hub for training and resources — sharing good practice, hosting peer learning hui, and building a shared repository of tools, with the support of Tasman Bay Guardians (TBG).



Baton freshwater monitoring group



Orinoco group with TBG's Elliot Easton

MCC also supports iwi-led cultural health monitoring and will continue to connect with iwi partners about their projects. Where possible, cultural health indicators will be integrated into community-based monitoring approaches.

As the strategy evolves, FMG's role may expand — linking monitoring to restoration, priority water quality issues, habitat improvements, flood resilience, and catchment-wide planning. The FMG will:

Summary targets and indicators table

Focus area	Key actions	Draft targets
Existing freshwater monitoring	Support existing freshwater monitoring groups:	✓ All current groups still active and self-sufficient in 2027
groups	√ to become self-sufficient, clear on their goals, and linked	✓ Data being shared widely by all groups by 2027

Focus area	Key actions	Draft targets
	with the wider sub-catchment community ✓ by providing templates, guidance, and access to resources, in collaboration with TBG. ✓ By offering advice on actions to improve freshwater health, where appropriate and with expert input. ✓ Work with groups to review and share monitoring data so it is accessible, appropriately held, and used to inform restoration and planning. ✓ Hosting annual sharing and learning hui	 ✓ 5 groups implementing restoration actions by 2027 ✓ 80% of groups attend shared annual hui
New community- based monitoring	Expand community-based monitoring into unmonitored tributaries where capacity allows.	 ✓ 10 MCC SHMAK kits by 2027 ✓ 10 active groups by 2027 ✓ 20 active groups by 2050 ✓ Groups for all subcatchments by 2125 ✓ Data shared catchment wide which influences restoration priorities by 2030
lwi led Cultural Health Monitoring	Support iwi led Cultural Health Monitoring by: ✓ Providing funding support ✓ Linking findings with CBFM approaches, and the CBFB community	 ✓ Inclusion of cultural indicators ✓ Hold combined CBFM and CHI hui by 2027

Focus area	Key actions	Draft targets
Temperature and sediment monitoring	Support improved temperature and sediment monitoring and clearer reporting on trends and hotspots, in collaboration with partners and sector groups Consider an expert review of all sediment research and summary of findings, including gaps.	 Joint hui on data needs held by 2026 One joint sediment monitoring project initiated by end of 2026
Partner relationships	Maintain and build positive, reciprocal relationships with TBG, TDC and other delivery partners	 ✓ Ongoing support for TBG and other partners ✓ Number of training sessions delivered ✓ Group satisfaction and retention Partner feedback and coordination outcomes
Wider community engagement	Engage the wider community in freshwater monitoring through stories, events, and data, including helping communities understand sediment sources and impacts	 ✓ 4 stories in 2026 ✓ 1 wider sharing event by 2026 ✓ 2 sub-catchment hui by 2027

Restoration & Habitat Enhancement

MCC enables restoration through coordination, technical input, and grassroots delivery, largely led through MCC's Biodiversity and Restoration (BAR)Thematic Group. These actions improve sediment control, temperature regulation, flood buffering, and habitat connectivity — all essential to the vision of cool, healthy streams and rivers.

Riparian Planting and wetland restoration

These actions are covered in the Biodiversity and Restoration Strategy.

Fish Passage

While not a current priority, MCC recognises that barriers to fish movement — such as culverts, weirs, and dams — limit mahinga kai recovery and stream health. Where capacity allows, MCC will support mapping in collaboration with TDC, and removal of key barriers, especially in small streams.

MCC will:

- Support iwi, council, and community groups with their work to identify priority sites
- Connect community groups to TDC to enable sharing of technical advice and where feasible seek funding for pilot removals, as this is a key barrier.
- Share good practice and link fish passage improvements to broader restoration efforts

Floodplain Futures

Flood resilience in the Motueka Catchment is complex and deeply felt. While some advocate for nature-based approaches like floodplain reconnection and wetland expansion, others prioritise engineered solutions — including stopbanks, gravel extraction, and channelisation — to protect property and manage risk. These perspectives reflect lived experience, especially in flood-prone areas, and must be part of any planning conversation.

MCC will support collaborative planning with communities, iwi, councils, and technical experts to explore a range of resilience building actions. These may include restoring floodplain function, improving drainage, expanding wetlands, adapting infrastructure, and supporting emergency preparedness.

Where capacity allows, MCC will work with TDC and landowners to explore remeandering pilots and other projects in selected reaches to explore nature-based solutions — demonstrating how reconnecting rivers with their floodplains can reduce flood peaks, improve habitat, and restore the catchment's sponge-like function.

Action area	Draft targets
 Collaborative Planning ✓ Facilitate inclusive hui and workshops to explore flood history, risk, and future options ✓ Build relationships with partner agencies and involve them in hui, particularly TDC ✓ Coordinate input from iwi, engineers, scientists, and landowners ✓ Advocate for planning that balances ecological function, safety, and landowner priorities 	 One hui held by end of 2025 3 workshops/year from 2026 5 sub-catchment plans by 2030 100+ people attend 2025/2026 hui Templates developed and distributed by 2026 3 plans developed by end of 2026, whole catchment flood resilience plan by 2030

Action area	Draft targets
 ✓ Support sub-catchment groups to develop tailored flood resilience plans ✓ Link flood resilience actions to restoration, monitoring, and community wellbeing 	MCC supports several groups to implement flood resilience action(s) by 2028
Nature-Based Pilots - Pilot re-meandering and other nature-based approaches in suitable locations in collaboration with partners, including TDC. Consider community education around nature based solutions.	 1 re-meandering site scoped by 2026 2 sites implemented by 2028 Monitoring undertaken at sites and shared 1 hui by end of 2026 on nature based solutions
Community-Led Resilience Support landowners and sub-catchments to implement flood preparedness and resilience actions and plans.	 Priorities identified in 5 sub- catchments by 2027 3 landowners/sub-catchments supported by end of 2026

Community Connection to Freshwater

MCC strengthens community relationships with freshwater through care, recreation, storytelling, and flood preparedness. These actions build shared ownership, cultural connection, and long-term resilience.

MCC will support communities to understand the condition of their local streams, including the causes of sedimentation, temperature changes, and habitat loss. Through workshops, storytelling, and peer learning, we will build capacity to act — from individual landowners to coordinated sub-catchment groups.

These efforts reflect the River Access and Recreation vision: a connected network of pathways and places that foster care, enjoyment, and respect for the awa, and the work of the Living River Group who wish to strengthen community care and respect for the river.

These actions may be delivered through a reconfigured freshwater engagement group if the Living River and Access & Recreation Groups merge or transition.

Summary action and targets table

Action Area	Targets
 Sub-Catchment Engagement and action facilitate hui and peer learning in subcatchments facilitate sharing by freshwater monitoring groups to their wider community support groups to develop local priorities and action plans provide templates and provide advice and resources for individual landowners restoring independently. 	 MCC / FMG holds 6 subcatchment hui by 2027 5 active groups by 2027 Suite of tools and templates added to MCC website by 2027 2 groups develop sub-catchment plans by 2027. Could use this template.
 River Access & Recreation assess future flood damage risks of any upgrades. Where appropriate, MCC will work with partners to improve access to swimming spots, walking tracks, and environmental reserves. 	 Picnic table sites assessed and repaired where feasible
 MCC will coordinate and support storytelling (including a community-led video about the Motueka River), events, youth engagement, and practical guidance to help communities understand, connect with, and care for their local rivers and streams. Signage will be used to deepen river literacy — sharing stories, species, and catchment values. Offer diverse opportunities for learning, dialogue, and action across the catchment. 	 1 event/year from 2025 5 schools engaged by 2027 Community video produced by 2027 if funding sourced 1 new sign along the river by 2027, 4 by 2040

6.2 Biodiversity & Restoration Strategy



Purpose

Restore native ecosystems across the Motueka Catchment by reconnecting fragmented habitats, supporting taonga species, and enabling community-led action that builds long-term ecological and cultural resilience.

Context

Native biodiversity in the catchment faces ongoing pressures — including habitat fragmentation, sedimentation, invasive species, and the decline of culturally significant fauna and flora. These pressures are compounded by climate vulnerability and land use change, and require coordinated, long-term action across landscapes and communities.

MCC's Role

MCC supports biodiversity restoration by enabling landowners, iwi, and community groups to lead action in ways that reflect their values, capacities, and connections to place. This includes coordinating where needed, reducing barriers to delivery, and amplifying work already underway. The MCC's BAR Group takes an ecosystem-based approach that integrates planting, remnant protection, seed islands, and natural regeneration with species recovery and long-term stewardship. This work links with the Pest Management Group (PMG's) mahi to address weeds and predators across the catchment.

This strategy has three connected threads – habitat restoration and ecological connectivity, weed control, and predator control.

6.2.1Habitat Restoration & Ecological Connectivity

Habitat restoration reconnects fragmented ecosystems and supports species that define the Motueka Catchment and that the community cares about. MCC prioritises riparian zones, wetlands, and lowland forests.





Biodiversity and Restoration pricking out event

Dovedale community nursery seed bomb trials

Delivery is coordinated through the BAR Group, which contributes to the long term regional goal led by Kotahitanga mō te Taiao (KMTT) to achieve 15% lowland forest cover.

Three-year priority actions (2025–2028)

Focus Area	Key actions	Targets
Riparian Planting	 Identify key tributaries for riparian planting, especially those linked to sediment, temperature, and flood risk. Collaborate with iwi, landowners, and freshwater monitoring groups to develop planting plans and funding options. 	 10 km priority tributaries planted by 2028 1 MCC lead project Riparian planting event \$ funding awarded
Wetland Restoration	 Support iwi-led and landowner restoration of lowland and spring-fed wetlands. Lead several projects if capacity allows. 	 4 wetlands restored or created by 2028 1 event / year At least 2 stories
Remnant Protection & Corridors	 Support landowners to protect and expand QEII and other remnant patches. Coordinate planting to connect fragmented habitats. 	 40 ha reconnected on erosion-prone slopes by 2027 10-20 landowners supported to expand or buffer remnants by 2027

Focus Area	Key actions	Targets
Community Propagation	 Maintain support for community nurseries and landowner propagation. Provide eco-sourcing guidance, seed sourcing, and bulk purchasing support. 	 Funding achieved 2 nurseries producing 20,000 plants/year;
Seed Islands & Innovation	 Trial seed islands and scalable restoration methods (e.g. direct seeding, grazable natives). Share lessons across the catchment. 	 1 seed island trial 2 grazeable native trials 2 direct seeding trials 2 sites trialling passive restoration by 2028
Advice, Events and engagement	 Provide planting advice and maintenance protocols. Host seasonal events for seed collection, propagation, and peer learning. Explore a QEII block gathering to connect landowners in collaboration with Pest Management Group. Celebrate and share restoration stories. 	 Stories Events delivered

Long term strategic direction

MCC's long-term strategy for biodiversity restoration is grounded in enabling diverse, locally led action across the catchment. Restoration will be scaled by supporting landowners, iwi, and community groups to restore native habitat in ways that reflect their values, capacities, and connections to place—not just at mapped priority sites, but wherever momentum and readiness exist.

To contribute to the 2125 vision, MCC will align planting and propagation efforts with KMTT's strategy, strengthen eco-sourced seed networks, and support culturally informed habitat design for taonga species such as whio, kōkopu and river-nesting birds. Habitat work will also support climate resilience, with riparian and wetland planting linked to sediment control, aquifer recharge, and flood buffering.

Sub-catchment planning and nature-based solutions will help integrate this work with MCC's freshwater strategy, ensuring restoration contributes to both biodiversity and hydrological health.

Long-term success depends on intergenerational stewardship. MCC's role is not to lead top-down planning, but to cultivate the conditions for restoration to thrive—through relationships, seasonal planning, peer learning, and adaptive delivery. Over time, success will depend on shifting norms: restoration becomes expected, celebrated, and sustained across generations.

Using the Plan as a Tool for Strategic Delivery

This plan is designed to guide action. It provides a shared framework for MCC and its partners to:

- Assess feasibility and capacity for different restoration approaches
- **Identify high-impact opportunities** based on ecological need, community readiness, and cultural significance
- Coordinate funding, contractors, and technical support across the catchment
- Track progress toward long-term targets and indicators
- Adapt delivery based on feedback, monitoring, and lived experience

To support delivery, MCC will explore a range of economic levers and creative engagement strategies—including philanthropic partnerships, incentive models, and community-led innovations such as speed planting competitions and restoration challenges. These approaches can help build momentum, attract new contributors, and make restoration more visible and rewarding. MCC's role is to enable these ideas to flourish while ensuring they remain grounded in ecological integrity and community values.

Over time, MCC will develop practical tools—such as prioritisation matrices, seasonal planning templates, and restoration dashboards—to help landowners and sub-catchment groups assess which actions are most achievable, effective, and aligned with their goals. These tools will support transparent decision—making and help ensure that restoration is paced to match capacity, while still contributing meaningfully to catchment-wide outcomes.

Habitat Restoration – Targets & Indicators

Action Area	Draft Medium and Long Term Targets	Proposed Indicators
Riparian Restoration	 50 km restored across subcatchments by 2040 Continuous forested corridor along Motueka River and major tributaries by 2125 	 Area shaded Stream temperature and clarity (longer term) Aquatic species presence (longer term)
Wetland Restoration	 100 ha restored, including spring-fed and floodplain wetlands by 2040 Wetland networks supporting aquifer recharge and flood buffering by 2125 	 Water retention Indicator species (e.g. kōkopu, tuna) Landowner uptake
Forest Connectivity	 200 ha restored to link key remnants and riparian zones by 2040 Catchment-wide forest corridors supporting species movement by 2125 15% lowland cover established by 2125 	Corridor mappingErosion reductionBird and invertebrate activity
Remnant Protection	 100 remnant sites protected and buffered by 2040 All significant remnants protected and ecologically connected by 2125 	 Area protected Connectivity to other patches Landowner satisfaction
Community Propagation	 5 nurseries producing 50,000+ plants/year 20 seed islands by 2040 Intergenerational propagation networks supporting ecosourced restoration by 2125 	Plants distributedSpecies diversitySeed island success and replication
Natural Regeneration	 Passive restoration adopted across 10% of catchment by 2040 	Area under passive restorationSeed source proximity

Action Area	Draft Medium and Long Term Targets	Proposed Indicators
	 Self-sustaining native regeneration in suitable zones by 2125 	 Fauna-supported regeneration
Grazable Restoration	 10 sites integrated into farm systems by 2040 	Weed suppression effectivenessTransition plans in placeFarmer feedback
Strategic Pilots	 5 methods scaled across catchment by 2040 Innovation embedded in restoration planning and delivery by 2125 	Methods trialledLessons sharedSites scaled or replicated

6.2.2Weed Control

Invasive weeds suppress native regeneration, degrade habitat quality, and increase restoration costs. Old Man's Beard (OMB) is a particular threat in forest remnants, riparian corridors, and QEII blocks. MCC's current approach focuses on strategic site-based action, community coordination, and practical support.

The Pest Management Group has led efforts at Haycocks Bush — a significant remnant site — through regular weeding bees and contractor support. Volunteers have received training in OMB removal techniques and cut-and-paste materials have been distributed. MCC plans to continue this work, expand to other priority sites, and continue to support groups like the Motueka Valley OMB team and the BOMB Squad in Brooklyn.





Haycocks Bush weeding bee 1

Brooklyn BOMB squad tackling huge OMB vines

Weed control is not a standalone task — it's embedded in restoration design, planting maintenance, and long-term ecological recovery.

Short-Term Actions (2025–2028)

These actions continue and strengthen current delivery through the Pest Management Group and local weeding groups:

- Maintain regular weeding bees at Haycocks Bush, with contractor support between events and expand to other sites as capacity allows
- Support active community groups (e.g. Motueka Valley OMB, BOMB Squad) through event promotion and resources
- **Distribute tools and materials** (e.g. cut-and-paste kits) and offer practical training in OMB removal to landowners and groups.
- Coordinate with landowners and sub-catchment groups to develop local weed plans linked to restoration
- Ensure planting advice and maintenance protocols are shared between BAR and Pest Management Groups to reduce reinvasion

Strategic Scaling-Up Actions

To move toward long-term ecological recovery, MCC and its partners will:

- Discuss the merits of developing a catchment-wide OMB control plan, mapping priority zones and setting staged goals
- Explore biocontrol options in collaboration with experts and funders
- Expand to additional high-value sites, contingent on funding and community capacity

- Embed weed control into restoration design, including species selection and planting layout
- Strengthen monitoring and reporting, linking weed suppression to biodiversity outcomes
- **Build intergenerational stewardship**, through education, leadership development, and shared data platforms

These actions will require sustained funding, strong partnerships, and a shift from reactive weeding to proactive, landscape-scale control — embedded in restoration planning and supported by community leadership.

Weed Control - Targets & Indicators

Action Area	Targets	Indicators
Old Man's Beard (OMB)	 Sustained control in 3 priority ecological zones (e.g. Haycocks Bush, Brooklyn, Tapawera) by 2028 	 Area under control Contractor and community involvement Reinvasion rates Integration with restoration plans
Other Weeds	 Support coordinated weed action in 5 sub-catchments provide tools and advice to 20 landowners 	 Number of landowners supported Events and training delivered Sub-catchment weed plans initiated Maintenance protocols adopted
Integrated Control Trials	 Trial staged clearance and grazable natives at 2 pilot sites 	Methods trialledEvaluation resultsSites scaled or replicated
Community Coordination	 Establish volunteer register and run 3 weeding bees by end of 2026 	Number of active groupsTraining and tool accessIntergenerational leadership emerging

6.2.3 Predator Control

Predator control is essential to protect native birds, invertebrates, and ecological processes. Possums, stoats, rats, and ferrets threaten biodiversity across forest, wetland, and riparian habitats — especially in bush remnants and along rivers where nesting sites are vulnerable.

MCC's approach is community-led and strategically coordinated. The Pest Management Group has distributed over 200 subsidised traps (DOC200s and rat traps) to landowners and residents across the catchment. Traps have been built affordably by Fish & Game staff, and new projects are underway in Shedwood Bush and the Motueka township/sandspit area.





Community member collected traps

MCC at the Motueka Sunday market disseminating traps

Trapping groups are forming organically, and MCC will support these by:

- Identifying lead contacts in each area
- Coordinating education events and peer learning
- provide support to groups or individuals that want to set up predator control projects within the Motueka catchment
- Sharing resources and good practice via the MCC website
- Encouraging use of TrapNZ and tracking active trap data
- Continuing to support with providing subsidised traps
- Encouraging community trap building, such as through the Nelson Trout Fishing Club to encourage and motivate a trapping community.
- Continuing to support backyard trappers across the catchment, including to maintain data on catches and number of traps deployed.
- Linking with other projects in the catchment and beyond (e.g. TET's trapping coordinator, Farmers for Whio network)
- Prioritising effort in high biodiversity zones bush remnants, forest edges, estuaries, and river margins
- Collaborating with TDC and trapping experts to strengthen technical advice and monitoring

MCC will also begin to address a key gap: monitoring outcomes. This includes understanding which species are being protected, what predators are present, and how trapping is influencing biodiversity over time.

Predator Control – Targets & Indicators (by 2027)

Focus Area	Targets	Indicators
Trap Distribution & Coverage	 Distribute 300+ traps across catchment, establish 10 active trapping clusters with local leads 	 Number and type of traps distributed Geographic spread Number of active clusters and lead contacts
Community Coordination	 Run 3 education events maintain online resources and peer learning channels 	 Event attendance Website engagement Feedback from trappers and leads
Monitoring & Data	 100+ active traps with data recorded in TrapNZ pilot species monitoring in 3 key zones 	 TrapNZ usage rates Predator detection trends Indicator species tracked
Strategic Partnerships	 Formal links with TET, Farmers for Whio, DOC and TDC coordinate effort in priority biodiversity zones 	 Joint initiatives launched Shared resources or training delivered Collaborative planning in high-value areas
Expert Support & Advice	 Enable expert input across all active clusters via Pest Management Group members 	 Number of groups receiving expert support Uptake of best practice Trapper confidence and retention

6.3 Productive Land Use Strategy



The Motueka Catchment is a working landscape—home to farmers, foresters, growers, and lifestylers who shape the land daily. This strategy supports those who care for the land to do so in ways that sustain both profitability and ecological health.

Many landowners are already leading restoration—fencing QEII blocks, planting riparian

zones, restoring wetlands, controlling predators, and creating habitat. MCC recognises and celebrates these efforts, aligning land management with catchment-wide restoration goals.







Native planting on Evan Baigent's farm in Upper Motueka

Primary producers are increasingly adopting good management practices through industry programmes like Global Gap, NZ Gap, Farm Assurance Plus, and Fonterra farm plans. Many forestry companies also hold international sustainability accreditation.

Farm environment plans—especially in horticulture and pastoral sectors—are expected to target sub-catchment risks and may include greenhouse gas mitigation. MCC acknowledges the realities of rural land management: time pressures, rising costs, regulatory complexity, and climate extremes including drought, flooding, and biosecurity threats.

Catchments and sub-catchments should also be focal points for farm and community adverse event planning and response. MCC's strategy supports pastoral, forestry, and horticultural sectors—recognising achievements and helping landowners build resilient, diversified, and climate-adapted businesses.

Expanding Sector Support

Until now, MCC's land management focus has been shaped by its forestry working group. This strategy expands support across all three key productive land uses—pastoral farming, forestry, and horticulture—each with shared and sector-specific approaches. Some strategies also overlap with biodiversity and pest control goals.

MCC will seek opportunities to assist farmers and growers to access financial rewards for good environmental practice, trial new crops suited to changing conditions, and navigate freshwater and climate-related planning requirements. Flood resilience is addressed in a separate section of this plan.

6.3.1 Common Strategy for Landowners, Farmers and Growers.

Focus Area	Key Actions	SMART Goal (Draft)
1. Biodiversity	 Support landowners to care for existing and create new native biodiversity on non-productive private land including planting, natural regeneration and enhancement of bush blocks and wetlands. Provide support for weed control and predator control including possums, deer, goats, rats, stoats on private land. 	Provide ongoing advice, resources, incentives, and leverage funding to support landowners' goals for new and care of existing native biodiversity on private land.
2. Engagement, Learning & Support	 Review thematic groups and assess how best to include farming and horticulture sectors Partner with sector groups (e.g. B+LNZ, DairyNZ, Fed Farmers) on events and guidance Link landowners into subcatchment groups and stream monitoring Remove barriers to participation (e.g. time, complexity) Celebrate small wins and peer learning 	Launch 2 new thematic groups, link 50 landowners into sub-catchment groups, and host 3 cross-sector learning events by 2026

A. If freshwater farm plans or greenhouse gas (GHG) mitigations (pastoral only) become required, MCC will provide both a voice and information for MCC farmers/growers to ensure any processes are targeted correctly, practical, align with existing plans, are not onerous and are likely to achieve environmental improvement in the Motueka catchment. B. MCC will work with farmers/growers to reduce the burdens of writing plans by providing key collective (sub) 3. Farm catchment resources, water quality **Environment** information, catchment risk **Planning** information, access to mapping, provision of exemplars, and workshops. C. MCC will support landowners wanting to achieve Farm Assurance Plus/Gold FEPs or Global/NZ Gap plans. D. MCC will encourage workshops and advice for the development of both

Over the next 2-3 years most MCC farmers find the development of a Farm Environment Plan (FEP) for their farm a rewarding and inspiring process.

80% of MCC farmers and growers have FEP (if required) which also includes an adverse event resilience plan by 2030.

15% of MCC farmers and growers achieve the highest level of environmental planning offered by their industries and also includes planning for climate change resilience.

By 2027 each subcatchment has an adverse event preparedness plan which links to growers and famers farm plans.

4. Alternative land use

MCC will provide farmers and growers with possible profitable, alternative land uses that could improve financial and environmental resilience in the catchment.

farm and (sub) catchment adverse event plans to reduce the impacts of and improve the response to adverse

events in the catchment.

Hold 1 workshop per year.

By 2125 farmers and growers are economically stable and are producing diversified high-quality products recognised throughout the world as being sustainably produced alongside the iconic and thriving Motueka River.

6.3.2 Pastoral

PLEASE NOTE - THIS SECTION HAS NOT YET BEEN REVIEWED BY THE FARMING SECTOR

The risks that sheep and beef farmers pose to the environment are associated with steeper topography and soil types which results in overland flows of sediment, phosphate and *E. coli* and these are addressed in this strategy.

On dairy farms with flatter terrain and higher stocking rates, nitrate leaching poses the greatest environmental risk, while overland flow is a lesser concern.

Eroding stream and river banks can also pose an issue in terms of sedimentation.

Focus Area	Key Actions	SMART Goal (Draft)
1. Sediment flows into waterways	A. Provide a platform for discussions between landowners and TDC that results in improved strategies for long term reductions in stream and riverbank erosion including bank stabilisation, riparian planting both exotic and native and their management, alongside strategies for improved waterway capacity, non-damaging flooding and sediment deposition and slowing down water flows. B. Support pastoral landowners to reduce land slippage on hills through control of water flows and strategic planting of exotic and/or native trees starting with the most erosion prone gullies. C. Work with farmers to adopt farming GMP initially targeting activities with the greatest sediment risk e.g. intensive winter grazing, soil cultivation etc. D. Improve knowledge and management of overland critical source flow	Reduce sediment runoff from priority erosion zones by 25% by 2035. By 2125 pastoral farmers retain all sediment on their farms and it is recycled into productive soils.

	pathways to reduce sediment and nutrient flows into waterways. E. Encourage and find funding and reduce consent barriers for the enhancement and creation of sediment and water capture (for stock water drought and storm resilience.) This will include ponds, sediment traps, wetlands, leaky weirs etc.	
2. Nutrient flows and E. Coli	In sub-catchments with defined water quality nutrient (N, P) or <i>E. Coli</i> issues, identified as coming from pastoral farming activities, MCC will work with farmers to find and aid implementation of potential solutions.	50% of farmers in subcatchments with nutrient and <i>E. coli</i> issues have implemented 1 or more activities targeted at reducing the flow of nutrients or <i>E. Coli</i> into waterways by 2030. By 2125 >90% of nutrients and faecal matter are retained and reused on the farm through GMP and new technologies.

6.3.3 Horticulture

PLEASE NOTE - THIS SECTION HAS NOT YET BEEN REVIEWED BY THE HORTICULTURAL SECTOR

The risks that hops pose to the environment are largely associated with the potential (minimal research) loss of nutrients to water via leaching of nitrogen fertiliser and compost leachates. In pip fruit spray use is the main risk. Horticulture (and a few dairy farms) on the river may pose a risk to the Motueka River and its aquifers from water extraction for irrigation.

Water quotas are regulated under the resource consents and the water conservation order which seek to maintain minimum flows in the rivers.

However, growers not using their quota may run the risk of having their quota cut

back. There is scope for more efficient use of water in horticulture which could reduce the water take from our aquifers/rivers and this will be important during increasing intensity and frequency of droughts particularly in the centre of the catchment.

There has been widespread adoption of integrated pest management by horticulture that uses beneficial insects, natural diseases and cover crops to reduce the chemical use.

Focus Area	Key Actions	SMART Goal (Draft)
	A. MCC will consider it' role in the current water quota system so that landowners don't feel pressured to use water to maintain their water quota for the future.	
	B. MCC will support horticulture in their desire to improve efficiency of water use through uptake of more efficient water delivery systems and soil moisture monitoring.	Irrigation throughout the catchment uses best industry practise by 2035.
1. Water extraction from aquifers and the river for irrigation use	C. MCC will facilitate information flow on ways to improve soil health and soil carbon in compacted or regularly cultivated soils to improve water holding capacity therefore improve drought resilience and reduce water use.	By 2125 water used on farms has no negative impact on the health of the river and some farmers capture water during high flow events to use on their farms.
	D. On soils with a strong clay base suitable for creating ponds or wetlands MCC will work with landowners and TDC to reduce regulatory barriers, enhance biodiversity values and make it easier for landowners to capture water during high flow events and use for irrigation.	

Integrated pest management	 A. MCC will work with industry organisations to share best practises for use of integrated pest management thereby reducing chemical use in horticulture. B. MCC will provide information and promote native plantings that enhance numbers of pollinating and other beneficial insects near to horticulture. 	There is an increasing adoption of integrated pest management and other technology that reduces use of chemicals on horticultural properties.
3. Nutrient flows	A. MCC will work with industry organisations to share best fertiliser practises to minimise the leaching of nutrients into the aquifers.	50% of farmers have implemented GMPs to reduce the loss of nutrients by leaching by 2030. By 2125 all nutrients are retained and reused on the farm

9.5 Forestry

PLEASE NOTE – THIS SECTION HAS NOT YET BEEN REVIEWED BY THE FORESTRY SECTOR

Forestry covers roughly a quarter of the Motueka Catchment, including extensive areas on steep, erosion-prone Separation Point granite. Forest cover contributes positively to water quality, carbon storage, and local livelihoods, and the sector plays a significant role in the regional economy. At the same time, some forestry practices can increase sediment loss, landslide risk, and stream degradation. Broader impacts may include altered hydrology, reduced aquatic and terrestrial biodiversity, and loss of riparian habitat, especially in headwater streams and post-harvest periods.

Long-term Integrated Catchment Management (ICM) research in Motueka has highlighted the importance of tailoring forestry practices to terrain sensitivity, embedding monitoring, and taking a systems approach to catchment resilience—especially in the face of increasing droughts, floods, and climate variability.

Forestry companies operating in the catchment have taken steps to improve environmental practices, including enhanced riparian setbacks, stream health monitoring, and trials of alternative species. Many are working under international sustainability frameworks, such as Forest Stewardship Council certification. There is a clear commitment across the sector to continue improving practices over time, and to respond constructively to community concerns.

MCC's Forestry Working Group brings together iwi, community members, forest managers, scientists, and small block owners to share knowledge, surface concerns, and highlight good practice. The actions in this plan build on that collaborative foundation—supporting riparian and living fence trials, facilitating site visits, promoting species alternatives, and amplifying stories of innovation and care.

MCC's role is to foster trust, share good practice, and partner with iwi, landowners, forestry operators, and agencies to support projects that improve environmental outcomes and strengthen community relationships. Community voices—particularly those affected by forestry impacts—are central to this strategy. At the same time, MCC acknowledges the sector's ongoing efforts and the importance of constructive, solutions-focused dialogue. Progress will come through collaboration, not polarisation.

MCC's long-term goal is to support forestry that enhances catchment health, respects cultural values, and responds to community concerns—while recognising the sector's contribution to regional resilience and innovation.

Forestry Action Framework – MCC's Role and Priorities

Action Area	What MCC Will Do	Targets (Draft)
Reduce the detrimental impacts of large-scale forestry	 Support innovative projects that reduce environmental impacts and showcase good practice Strengthen relationships with commercial forestry operators Share best practice case studies and encourage uptake across the sector Work with other organisations and forestry owners to explore options for mitigating post-harvest impacts and flood-related sediment loss, 	 Riparian and other buffers (set target) living fence trials (set target) best practice case studies (set target) increased number of sites verified as meeting best practice environmental standards (consider target)

Action Area	What MCC Will Do	Targets (Draft)
	especially on Separation Point granite terrain	
	 Continue supporting living fence 	
	trials and riparian buffer	
	establishment where these are	
	effective	
	Support and encourage continued	
	discussions and action on creating	
	buffer zones to protect high	
	sediment yield sites (outside	
	riparian areas)	
	 Use sediment yield data, 	
	community input, and forestry	
	sector feedback to identify priority	
	zones for action—focusing efforts	
	where ecological benefit and	
	readiness align	
	 Support the continued transition 	
	away from pine on erosion-prone or	
	high-risk sites	
	 Support trials of alternative forest 	
	models (e.g. continuous cover,	
	mixed species, native restoration)	
	Promote uptake of economically	
	feasible and ecologically resilient	
	forest systems	
	 Collaborate with forestry operators 	
	to increase the number of sites	
	meeting best practice	
	environmental standards	
	 Work with iwi and partners to 	
lwi-owned	identify priorities, approaches, and	(SMART goal to be co-
forestry	opportunities for iwi-led forestry,	developed with iwi
,	respecting cultural values and	partners)
_	aspirations	
Improve	Support expert synthesis of	. Dana anala finalita da ala a
understanding	research done to date (including	Research findings shared
of forestry	ICM) to identify current findings and	as available
impacts on		

Action Area	What MCC Will Do	Targets (Draft)
catchment health	 data gaps, particularly in relation to sediment impacts. Support research and partner-led initiatives to identify sediment sources and landscape responses Share findings with stakeholders and the wider community to build shared understanding and inform future planning 	
Foster transparency through site visits	 Organise visits to large-scale forestry sites for community members, iwi, and small forest owners to build understanding of current practices and terrain- sensitive approaches 	Draft target about number of site visits
Promote alternatives to pine	 Collaborate with MPI and others to provide information on alternative species and forest systems Support small forest owners and farmers to plant native or mixed-species forests as productive alternatives Pilot continuous cover forestry or mixed-species trials in vulnerable zones Identify practical barriers (e.g. cost, advice, market access) and explore partnerships or funding pathways to support landowners Share case studies to build confidence and uptake 	Draft target about alternative planting projects supported
Engage and inform the community	 Share best practice stories and case studies from across the sector Ensure balanced, science-based communication about forestry impacts and benefits Facilitate discussions between community and industry to build common ground 	 Draft target about community/forestry hui held Draft target about best practice stories shared

Action Area	What MCC Will Do	Targets (Draft)
	 Host dialogue around forestry expansion, especially where it intersects with biodiversity, cultural values, or productive farmland Promote awareness of the Forestry Working Group and its contributions to catchment health 	
Clarify MCC's role and the work of the Forestry Working Group (FWG)	 Review the work of the FWG and identify next steps for its evolution Consider representation on the FWG and the need for a balanced mix of community members and forestry company representatives, or explore a different model. Outline MCC's role in supporting understanding of NES-CF, regional plans, and accreditation schemes Provide guidance or referrals to help landowners navigate rules and consents Create a monitoring approach to track progress across key actions and support adaptive management 	• Draft target about monitoring framework developed

7. Implementation Plan

7.1 MCC's Role in Delivery and ongoing momentum

MCC is a community-led collective. Its governance, planning, and delivery are driven by people who live in the catchment and care deeply about its long-term wellbeing. While MCC engages with external organisations, it does so through relationships grounded in place, shared stewardship, and mutual respect. MCC's role is to:

- Enable and support voluntary, landowner-led restoration and monitoring
- Coordinate strategic planning and prioritisation across the catchment
- Facilitate partnerships, technical input, and capacity building
- Uphold inclusive governance and adaptive management
- Represent community interests while evolving to meet broader goals

The Motueka Catchment Plan builds on four years of community-led action, coordination, and capacity building. MCC has already laid strong foundations through:

- Active thematic groups delivering on biodiversity, freshwater monitoring, pest management, forestry, and recreation priorities
- Sub-catchment networks forming organically, especially in the upper catchment, with strong local leadership and peer support
- On-ground restoration including riparian planting, fencing, and pest control, supported by Trees That Count, community nurseries and growing community propagation skills
- Monitoring systems like SHMAK kits and eDNA sampling, with community training underway
- Governance development, including a formalised Steering Group, cochairing, and forming a vision, mission, objectives and Terms of Reference
- Community engagement, with over 100 attendees at hui, hundreds of survey responses, and growing visibility through communications and events

Building on the ICM Legacy

The Motueka Catchment has long been a site of innovation in integrated environmental management. The Integrated Catchment Management (ICM) programme (2000–2015) laid critical foundations by:

- Advancing interdisciplinary science across land, water, and community systems
- Developing tools for participatory modelling, scenario planning, and stakeholder engagement
- Highlighting the importance of co-learning and adaptive management in complex catchments

MCC carries this legacy forward — translating research insights into community-led action and long-term restoration. Where ICM focused on understanding systems, MCC focuses on enabling change.

This plan honours the past and current momentum and provides a pathway to sustain and scale it.

7.2 Strategic pathway – two-year implementation (2025–2027)

The next 1–2 years are a foundation phase. With limited funding available, the focus is on the following five areas:

Focus Area	Key Actions	Delivery Mode
Keep Momentum Alive	Support existing thematic groups; maintain and where possible increase sub-catchment connections; host low-cost hui and workshops	Voluntary effort; in- kind support
Strategic Prioritisation	Develop prioritising tools, identify high ranking actions; focus on high-leverage pilots	MCC coordination; partner input
Funding & Partnerships	Maintain existing partner relationships, develop new funding proposals linked to priorities; engage philanthropic and government partners; build case studies for investment	MCC lead; support from advisors

Focus Area	Key Actions	Delivery Mode
Profile & Visibility	Share success stories; update website and visuals; celebrate community effort	Communications volunteers; local media
	structures: explore new models for delivery	MCC facilitation; external input

Delivery will be coordinated across the following five groups:

Layer	Role in Implementation
Catchment Steering Group	Strategic oversight, prioritisation, alignment with regional frameworks, adaptive review
Paid staff	Communications, administrative support, logistics, event planning and delivery, some coordination.
Thematic Working Groups	Lead delivery within strategy areas: Freshwater, Biodiversity, Sustainable Land Management
Sub-Catchment Networks	Local action planning, peer learning, monitoring, and community engagement
Landowners & Partners	On-ground implementation, innovation, co-investment, and feedback

These groups will evolve as delivery scales and governance is refined. We anticipate that some of the groups will develop detailed workplans. We recommend that each workplan should clearly link to this catchment framework.

7.3 Strategic Pathway – 100-year implementation

Implementation is staged across four horizons, each requiring distinct system shifts and enabling conditions:

Timeframe	System Shifts Required	
2025–2030	Build trust and coordination; pilot restoration and monitoring; establish governance and funding foundations	

Timeframe	System Shifts Required
2030–2050	Scale restoration and monitoring; embed cultural indicators; normalise community-led stewardship
2050–2080	Transition land use practices; achieve ecological thresholds; institutionalise adaptive management
2080–2125	Maintain gains; intergenerational leadership; full catchment resilience and biodiversity recovery

Each phase will require new workplans, partnerships, and review — but this pathway ensures coherence and direction.

7.4 Achieving outcomes

All three strategic pathways follow a set of steps that ensure outcomes are achieved.

Outcomes Framework

Category	Freshwater Stewardship	Biodiversity & Habitat Restoration	Sustainable Land Management
2125 Outcome	Healthy, resilient awa with abundant mahinga kai and restored hydrological function	Thriving native ecosystems with stable populations of taonga species	Catchment-wide resilience to flooding and climate extremes, with ecologically sound and economically viable land use
Intermediate Conditions	 Riparian zones restored and maintained Sediment and nutrient loads reduced Catchment-wide monitoring embedded Landowner stewardship and iwi leadership normalised 	 Habitat connectivity Pest control Community planting Ecological thresholds achieved 	 Adaptive land practices Restored floodplains Sector-specific improvement pathways Community preparedness Integrated planning
Key Enablers	Long-term fundingCultural integrationCommunityawareness and	 Volunteer networks Iwi-led restoration Monitoring systems DOC and council support 	Landowner engagementTechnical supportPeer learning

Category	Freshwater Stewardship	Biodiversity & Habitat Restoration	Sustainable Land Management
	capacity • Trusted data		Cross-sector partnerships
Risks	Fragmented deliveryLoss of momentumRegulatorymisalignment	Climate stressorsLack of coordinationInsufficient scale	Economic pressuresSiloed planningInsufficient uptake or visibility

7.5 Funding and capacity

Many of the actions and targets in this plan rely on a secure funding stream to enable investment in research, monitoring, support for landowners and the productive sector, and coordination of projects and initiatives.

MCC is committed to identifying new sources of funding, and applying for funding as it arises, and aims to develop a Funding strategy to support long term goals and stable project delivery.

7.6 Indicators and monitoring

Monitoring is designed to track progress towards improved environmental and community outcomes, not just outputs. Indicators will evolve over time and reflect both scientific and cultural dimensions. Monitoring will be light-touch during the low-resource phase, with formal systems scaled up as capacity grows. We envisage to use the following indicators.

Timeframes	Example Indicators	
Short Term	# active sub-catchment groups; pilot sites established; participation in hui and workshops; LAWA land management register	
Medium Term	% catchment under restoration; monitoring coverage (e.g., SHMAK, eDNA); cultural indicators developed and used	
Long Term	15% lowland forest cover; stable populations of inanga, tuna, and other taonga species; reduction in flood damage and sediment loads; community-led monitoring embedded in governance.	

8. Conclusion & Call to Action

The Motueka Catchment Community Plan is a living guide for restoring our rivers, land, and communities. It connects ecological restoration, sustainable land use, and culturally grounded water care. Every action, big or small, contributes to the catchment's revival as shown in the visual below.

Your Role: A Call to Action

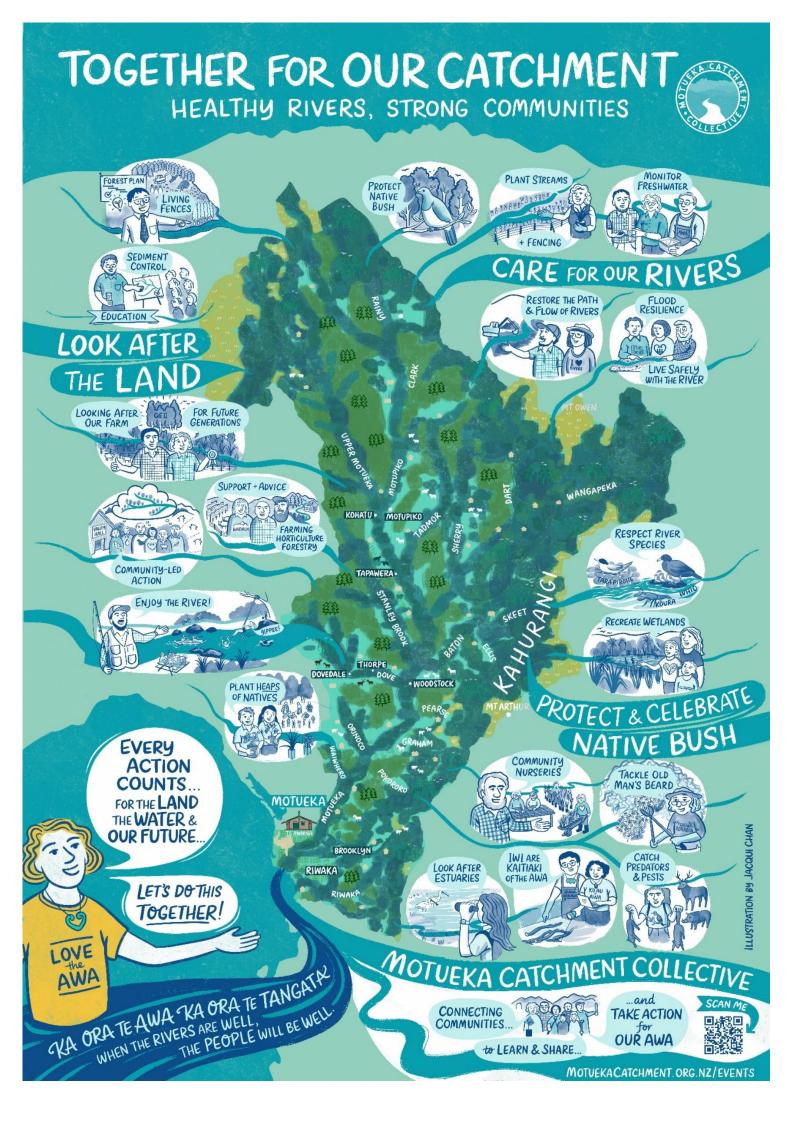
Now is the time to act. We invite all stakeholders—landowners, iwi, businesses, volunteers, and decision-makers—to:

- Engage: Join thematic groups, attend hui, and share your insights.
- Connect: Join or start a catchment group in your local community
- Act: plant trees, trap predators, control weeds, monitor your local stream
- Share: Help spread the vision across the catchment.

Moving Forward Together

Restoration is a journey of learning, adapting, and caring. Every planting day, every partnership, every story shared strengthens our collective impact. Together, we can build a legacy of resilience and connection.

If you'd like to get involved or learn more, please reach out. The future of our catchment is in our hands.



9. Appendices

These appendices are provided to give examples of tools and information that can be used to help implement the catchment plan.

Examples:

Community transformation using theories of change

Farmer engagement strategy

Mapping and prioritising tool.

Decision making matrix

10. References

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