



Awatuna – Pihama Catchment Strategy

Thriving farms, healthy waterways and a resilient rural community for future generations

A community-led strategy to improve water quality, strengthen freshwater ecosystems and reduce invasive species across the Awatuna – Pihama catchment.

Building on existing monitoring, biodiversity projects and local knowledge to create a connected catchment from Taranaki Maunga to the Tasman Sea

25,340

HECTARES OF LAND & WATER

84%

PASTORAL LAND USE

4 yrs

OF WQ MONITORING

10 yrs

OF CONCERTED GROUP EFFORT

1

INTEGRATED STRATEGY

3

INTEGRATED WORKSTREAMS

Established catchment group since 2020





01: Objectives & Approach

Catchment Strategy Summary

The Awatuna Pihamā Catchment Strategy combines science, community knowledge and practical action to improve environmental outcomes across the catchment.



improve catchment health by addressing three interconnected challenges:

Water quality pressure, fish barriers and fish habitat, and the spread of invasive species

1 UNDERSTAND

Build on monitoring, biodiversity surveys and local knowledge.



Water quality monitoring



eDNA & ecological monitoring



Local knowledge & observations



Data integration

2 IDENTIFY

Identify priority areas and opportunities for action.



Water quality hotspots



Fish barriers & habitat gaps



Gunnera source areas



Restoration priorities

3 PLAN

Develop practical projects focused on priority locations.



Restoration plans



Fish passage priorities



Gunnera control programmes



Partnerships & funding

4 ACT

Deliver on-the-ground actions that improve catchment health.



Fish passage projects



Riparian & wetland restoration



Gunnera control



Demonstration sites

5 MONITOR & ADAPT

Measure outcomes, evaluate progress and refine priorities.



Water quality monitoring



Ecological monitoring



Gunnera tracking



Review, learn and adapt

LEADS TO IMPROVED FRESHWATER

LEADS TO IMPROVED TARGETING OF RESOURCES

LEADS TO SUCCESS AND IMPROVED ENGAGEMENT

LEADS TO MEASURABLE IMPROVEMENTS

CELEBRATE AND COMMUNICATE SUCCESS

SUCCESS INDICATORS



Water quality trends improve over time.



Fish barriers are identified and progressively addressed.



Priority habitats are restored and connected.



Gunnera spread is reduced under control.



Community participation remains strong.



Monitoring results are used to guide investment and action.



LONG-TERM OUTCOME

A connected catchment where productive farms, healthy waterways and thriving native ecosystems improve together through coordinated community action, habitat restoration and evidence-based management.



OUR FOCUS AREAS THREE INTEGRATED WORKSTREAMS



WATER QUALITY & CATCHMENT UNDERSTANDING

Understand pressures and trends so we can target action where it will have the greatest impact.



FISH PASSAGE & HABITAT RESTORATION

Reconnect waterways and restore habitats to support native species and ecosystem health.



GUNNERA & INVASIVE SPECIES MANAGEMENT

Control Gunnera and invasive species to protect restoration investment and native ecosystems.



TARANAKI
CATCHMENT COMMUNITIES

Awatuna – Pihama

ABOUT AWATUNA – PIHAMA AND THIS CATCHMENT STRATEGY

The Awatuna Pihama catchment is one of the largest catchments in the Taranaki Catchment Communities programme.

Stretching from Te Papakura o Taranaki to the coast, the catchment supports productive farming, nationally significant freshwater ecosystems, indigenous forest remnants, wetlands and important native fish populations.

The catchment already has a strong foundation of environmental action. The Awatuna group formed in 2020 and since 2022, the community has undertaken monthly water quality monitoring, biodiversity assessments, fish passage projects and wetland development. The challenge is no longer where to start, but where to focus effort to achieve community set outcomes for the catchment.

This strategy provides a coordinated pathway that combines monitoring, restoration and invasive species management to improve catchment health over time.



SUCCESS INDICATORS: SHORT TERM

- Monitoring programme maintained.
- Priority waterways identified.
- Fish barriers mapped.
- Gunnera distribution understood.
- Demonstration projects established.

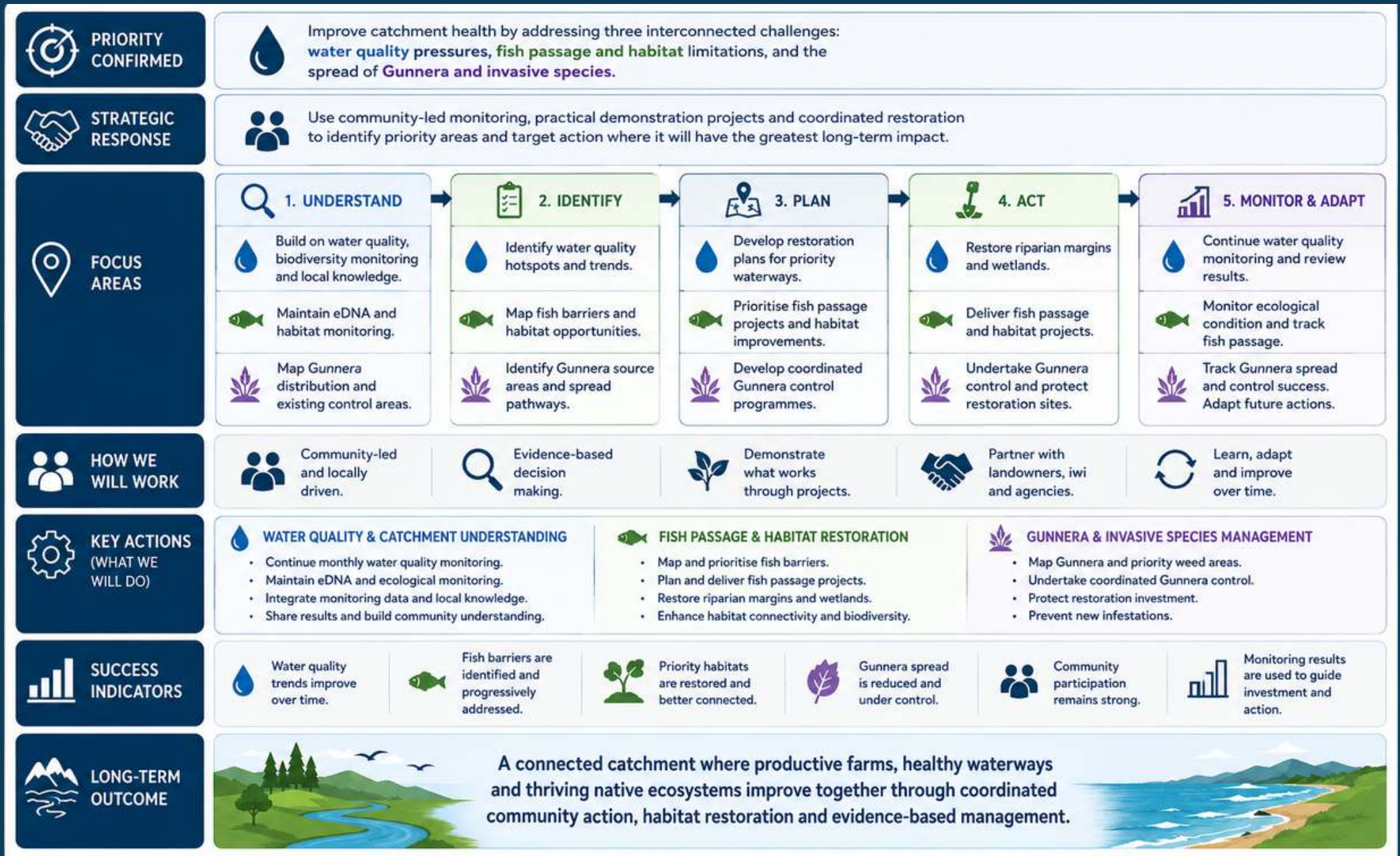
SUCCESS INDICATORS: MEDIUM TO LONG TERM

- Improved freshwater habitat condition.
- Reduced invasive species spread.
- Improved water quality trends.
- Increased native fish presence.
- Strong community participation and stewardship.



Catchment Strategy Logic

PULLING IT ALL TOGETHER ON A PAGE





02: What Makes Awatunma-Pihama Great

Catchment State

Biophysical character

The Awatuna Pihama catchment covers approximately 25,340 hectares and is dominated by productive volcanic soils derived from Taranaki Maunga. It has a large waterway network, threatened species and significant habitat restoration opportunities

LAND AND WATER

Three major waterway systems drain the catchment:

- Taungatara Stream
- Punehu Stream
- Otakeho Stream

The catchment contains:

- Extensive pastoral land use
- Indigenous forest in the upper catchment
- Numerous tributaries and spring-fed streams
- Wetlands and forest remnants
- Strong freshwater-to-coastal connectivity

SIGNIFICANT FRESHWATER SPECIES

The catchment supports several fish species, including:

- Shortjaw kōkopu – Threatened (Nationally Vulnerable)
- Lamprey (piharau) – Threatened (Nationally Vulnerable)
- Longfin eel (tuna) – At Risk (Declining)
- Brown mudfish – At Risk (Declining)
- Giant kōkopu – At Risk (Declining)
- Koaro – At Risk (Declining)
- Īnanga – At Risk (Declining)

WATER QUALITY SUMMARY

Monitoring indicates:

- Nitrogen hotspots occur in parts of the lower catchment.
- Dissolved reactive phosphorus is elevated across many sites.
- Sediment issues are generally localised and event-driven.
- E.coli remains a widespread pressure across much of the catchment

KNOWLEDGE STRENGTHS

- Four years of community monitoring.
- eDNA programme.
- Macroinvertebrate monitoring.
- Strong local knowledge.

REMAINING GAPS

- Fish barrier inventory.
- Gunnera distribution mapping.
- Prioritisation of restoration investment.
- Catchment-wide habitat connectivity assessment.



Lamprey (source: DOC)



Brown mudfish (source:DOC)



Giant kokopu (source: DOC)

Community Context

Community Stewardship

The Awatuna/Auroa Farming for the Future Catchment Group began as a Pest Free initiative before expanding into a wider catchment-focused programme.

Pihama is a vibrant, collaborative & proactive catchment community working towards the wellbeing and resilience of the community, farms & the natural world

ACHIEVEMENTS

- Monthly water quality monitoring since 2022.
- eDNA monitoring.
- Macroinvertebrate surveys.
- Fish passage initiatives.
- Wetland development.
- Agri4Kids programme.
- Community education events.
- Strong partnerships with iwi, DairyNZ and TCC.

COMMUNITY PRIORITIES

Workshop feedback highlighted:

- Fish passage
- Freshwater habitat
- Water quality improvement
- Wetlands
- Biodiversity
- Practical farm-scale action

Additional community discussion has identified Gunnera management as a growing priority requiring coordinated catchment-scale action.

Awatuna and Pihama catchments are advanced

- Four years of monthly monitoring.
- Existing fish passage projects.
- Existing wetland development.
- Strong partnerships.
- Proven ability to deliver projects.
- Strong participation across the catchment

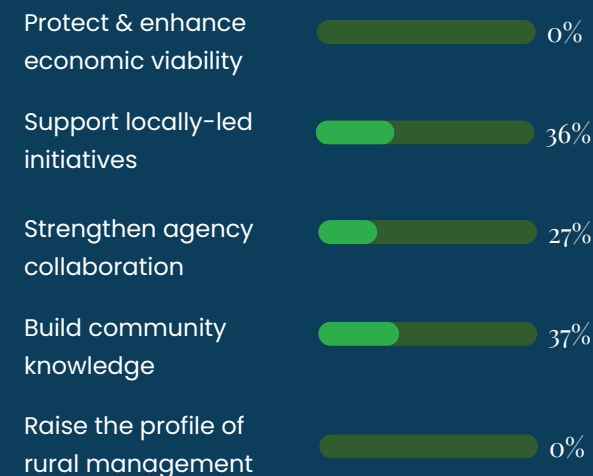


Local Feedback

ENVIRONMENTAL PRIORITIES



COMMUNITY PRIORITIES



Key Issues & Pressures

WHAT SHAPES THE STRATEGY



Water quality pressures

E.COLI

Elevated E.coli concentrations occur across many lower catchment sites.

NITROGEN

Nitrogen hotspots occur within parts of the catchment while phosphorus remains elevated across many waterways. Nitrogen accumulates in water as it moves down the catchment.

Invasive Species

GUNNERA

Gunnera is spreading through farmland, waterways and riparian corridors, particularly where plants establish in upper catchment source areas and disperse downstream.

Without coordinated management, Gunnera has the potential to undermine restoration efforts and reduce native habitat quality.

Dissolved Inorganic Nitrogen (readily available for plants and algae).

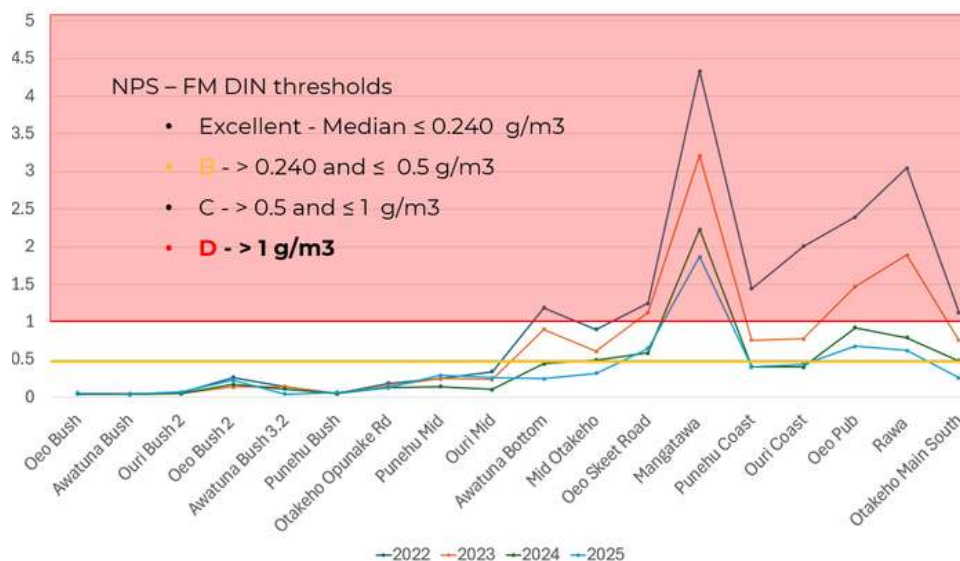


Image Gunnera Taranaki Regional Council

Key Issues & Pressures

WHAT SHAPES THE STRATEGY

AWATUNA - PIHAMA CATCHMENT GROUP CATCHMENT STRATEGY 2026



Ecological Pressures

LIMITED RIPARIAN COVER

Much of the catchment has limited streamside vegetation, reducing habitat quality, shading and contaminant filtering.

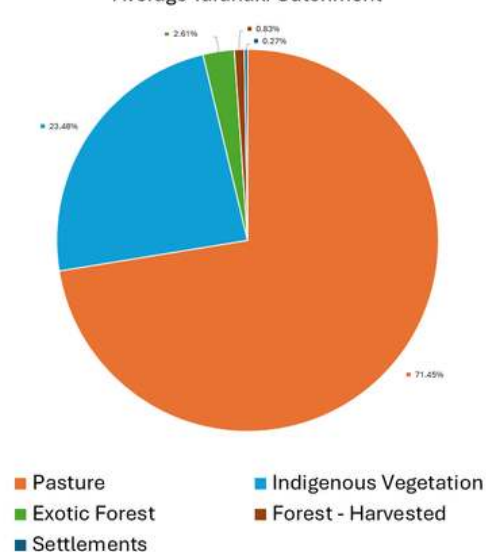
FISH BARRIERS

Barriers remain throughout the catchment and may restrict movement of native fish between the coast and upper catchment habitats.

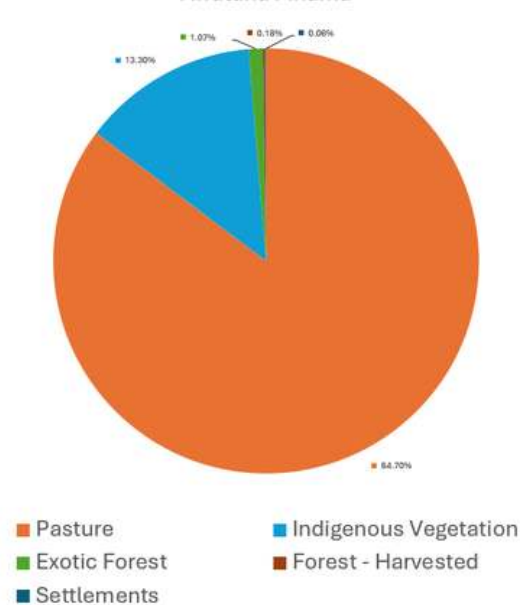
FRESHWATER CONNECTIVITY

Freshwater habitats remain connected but can be strengthened through targeted restoration.

Average Taranaki Catchment



Awatuna Pihama





03: Implementation

Priorities & Phases

This strategy can be broken down to phases of work and when stepped through to help reach catchment objectives. This page supplies a brief summary of those steps.

Simple phases of work through time



Phase 1: Years 1–2 — Build on existing action and set up for future actions

- Continue monitoring.
- Map Gunnera.
- Assess fish barriers.
- Identify priority waterways.
- Establish demonstration site

Phase 2: Years 3+ — Target catchment action

- Deliver fish passage projects.
- Restore priority habitats.
- Undertake coordinated Gunnera control.
- Expand wetland and riparian projects.

Phase 3 (Years 5+) – Inform Future Action

- Maintain gains.
- Target remaining hotspots.
- Improve ecological connectivity.
- Support long-term catchment resilience.

The strategy deliberately combines restoration, monitoring and invasive species management because each reinforces the others.

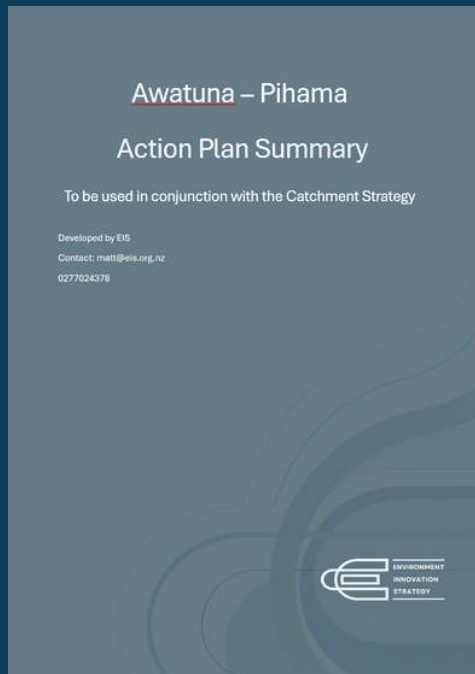


Meet Connected Outcomes

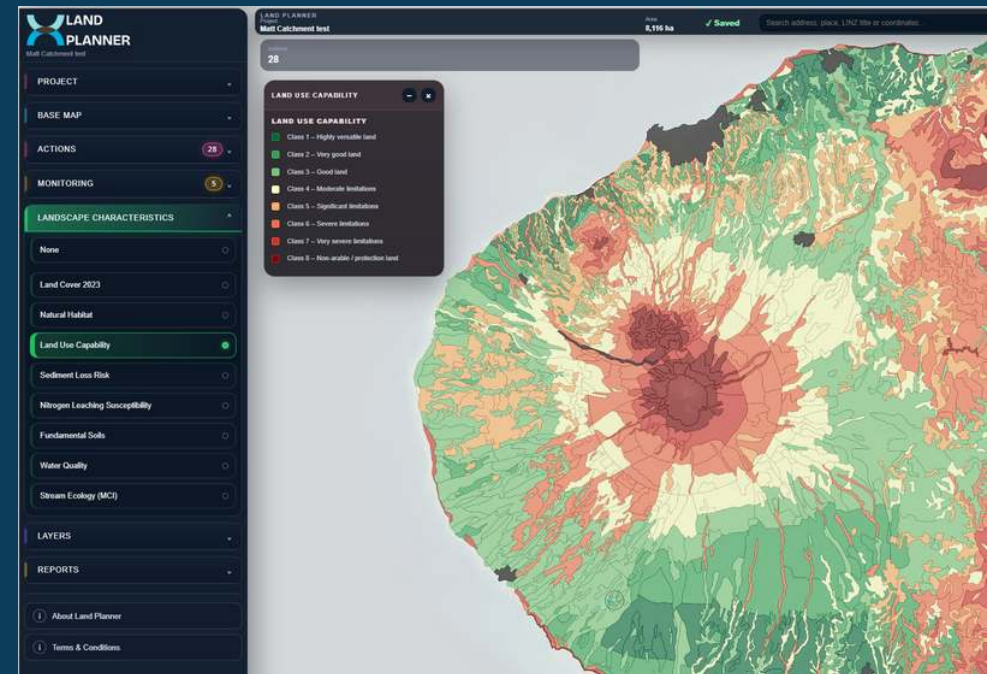
THROUGH ALIGNMENT OF THREE WORKSTREAMS ACROSS DIFFERENT SCALES OF ACTION



Action planning is a live approach



Year	Quarter	Workstream	Priority Action
2026	Q3	Water Quality & Catchment Understanding	Continue monthly water quality, eDNA and macroinvertebrate monitoring while reviewing monitoring locations and data gaps.
	Q3	Quercus & Invasive Species Management	Complete catchment-wide Quercus mapping and identify priority source populations for coordinated control.
	Q4	Fish Passage & Habitat Restoration	Complete fish barrier assessments and prioritise high-value fish passage projects.
	Q4	Water Quality & Catchment Understanding	Identify priority waterways, contaminant hotspots and restoration opportunities using monitoring and mapping.
2027	Q1	Fish Passage & Habitat Restoration	Develop restoration plans for priority waterways, wetlands and riparian margins.
	Q1	Quercus & Invasive Species Management	Begin coordinated Quercus control in priority source areas.
	Q2	Fish Passage & Habitat Restoration	Deliver fish passage improvements and demonstration restoration projects.
	Q2	Water Quality & Catchment Understanding	Produce the first annual Catchment Report Card and communicate monitoring trends.
2028	Q3	Community Integration	Hold field days showcasing fish passage, Quercus control and restoration projects.
	Q4	Quercus & Invasive Species Management	Review Quercus control outcomes and expand to additional priority sites.
	Q1	Fish Passage & Habitat Restoration	Expand wetland, riparian and habitat restoration into additional priority areas.
	Q2	Water Quality & Catchment Understanding	Review monitoring programme and update priority catchment maps.
2029	Q3	Community Integration	Strengthen partnerships and increase landowner participation.
	Q4	All	Complete three-year implementation review and prepare the next Action Plan.



Actions planning for this catchment has been templated by EIS into a word document. The key for this approach is that action planning:

- Remains live
- Discussed at regular intervals by the group
- Is adjusted as resources change
- Notes budget requirements for actions
- Includes monitoring and how to tell the story

The Land Planner Software will be available for TCC use in September 2026. This will enable visualisation of data, access to monitoring data, planning of actions and reporting.





04: Measuring success

Monitoring Action & Understanding

THROUGH ALIGNMENT OF THREE WORKSTREAMS ACROSS DIFFERENT SCALES OF ACTION

Awatuna-Pihama already has one of the strongest community-led monitoring programmes in Taranaki, including monthly water quality monitoring, eDNA assessments, macroinvertebrate monitoring and local environmental knowledge. Rather than creating a new monitoring programme, this workstream focuses on strengthening, integrating and applying that knowledge to support practical action.

The priority is to understand where contaminants originate, how they move through the landscape, where freshwater ecosystems are under pressure, and where restoration effort will have the greatest impact.

Importantly, monitoring is not an end in itself. The purpose is to support better decisions, guide investment, prioritise fish passage and habitat projects, and measure whether actions are making a difference over time.

Actions across multiple scales

Individual / Landowner

Share farm observations and local knowledge.

Identify areas where water, sediment and nutrients move across the farm.

Use monitoring findings within Farm Environment Plans.

Record observations during rainfall events.

Support access to monitoring sites.

Participate in biodiversity monitoring where possible.

Local / Community

Continue monthly monitoring programme.

Coordinate eDNA, macroinvertebrate and habitat assessments.

Maintain and expand monitoring sites where required.

Share monitoring results through field days and workshops.

Build monitoring capability within the catchment group.

Integrate farmer, iwi and agency knowledge.

Whole Catchment

Develop a shared catchment evidence base.

Identify water quality hotspots and contaminant pathways.

Prioritise streams, wetlands and restoration opportunities.

Develop annual catchment report cards and maps.

Direct future funding and investment.

Measure long-term catchment change.

Monitoring



MEASURING PROGRESS ACROSS THE CATCHMENT

Monitoring Component	What Will Be Monitored	Frequency	Who	Purpose
Water Quality Monitoring	E.coli, nitrate nitrogen (DIN), dissolved reactive phosphorus (DRP), turbidity, temperature and conductivity at existing monitoring sites across the catchment.	Monthly	Catchment group volunteers with support from partners	Track water quality trends, identify hotspots and measure change over time.
Freshwater Ecology Monitoring	Macroinvertebrates (MCI), stream habitat condition, fish observations, kōura observations and ecological health indicators.	Annually (summer)	Community volunteers with technical support	Understand ecological condition and identify habitat restoration priorities.
Fish Passage Monitoring	Fish barriers, culverts, weirs, stream connectivity, fish presence and movement.	Every 2–3 years	Catchment group with expert support	Assess freshwater connectivity and prioritise fish passage projects.
Gunnera & Invasive Species Monitoring	Distribution, density and spread of Gunnera, along with other priority invasive species where relevant.	Annually	Catchment group, landowners and partners	Identify source populations, track spread and measure control effectiveness.
Community Monitoring Days	Coordinated catchment-wide sampling, habitat assessments, restoration site visits and weed surveillance.	1–2 times per year	Catchment group and partners	Build participation, collect information and strengthen understanding of catchment issues.
Data Review & Interpretation	Water quality results, ecological monitoring, fish passage information, Gunnera mapping, farmer observations and agency/iwi knowledge.	Annually	Catchment group with support partners	Identify trends, priority areas and opportunities for targeted action.
Catchment Reporting	Monitoring results, maps, restoration progress, fish passage projects, Gunnera control outcomes and future priorities.	Annually	Catchment group	Share progress with the community and support decision-making.
Priority Area Identification	Water quality hotspots, fish barriers, habitat restoration opportunities, Gunnera source areas and priority waterways.	Reviewed annually	Catchment group and partners	Guide future investment and on-the-ground action.

What success looks like

MEASURING PROGRESS ACROSS THE CATCHMENT

Success should first be measured by the level of coordinated action occurring across the catchment. Over time, success shifts from participation and project delivery toward measurable improvements in waterway health, ecological connectivity and catchment resilience.

Focus Area	Individual / Landowner	Local Community	Whole Catchment
Water Quality & Catchment Understanding (Years 1–2)	Landowners understand how water, nutrients and contaminants move through their properties and contribute local knowledge to monitoring.	Monitoring programmes, biodiversity surveys and annual reporting are maintained and supported.	Water quality hotspots, contaminant pathways and priority waterways are identified and mapped.
Fish Passage & Habitat Restoration (Years 1–2)	Landowners identify habitat opportunities and support fish passage improvements where appropriate.	Demonstration sites, wetlands and restoration projects are established and shared.	Priority fish barriers and restoration opportunities are assessed and prioritised.
Gunnera & Invasive Species Management (Years 1–2)	Landowners identify Gunnera infestations and support coordinated control efforts.	Community surveillance and control programmes are established.	Catchment-wide Gunnera distribution is mapped and source populations identified.
Targeted Implementation (Years 3–5)	Farmers and landowners implement restoration, fish passage and invasive species management actions relevant to their properties.	Community projects expand and lessons are shared through field days and demonstration sites.	Restoration, fish passage and Gunnera projects are targeted to the highest priority locations.
Integrated Catchment Action (Years 3–5)	Monitoring findings are increasingly used to guide farm and land management decisions.	Community knowledge, monitoring and restoration activities are connected through a shared catchment programme.	Investment is directed toward priority waterways, habitats and invasive species hotspots.
Long-Term Catchment Outcomes (Years 5+)	Environmental stewardship becomes embedded within farm systems and land management decisions.	The catchment group remains active, connected and influential in driving environmental improvement.	Water quality trends improve, freshwater habitats become more connected, Gunnera spread is reduced and native biodiversity is increasing.

By 2035



WATER QUALITY
TRENDS IMPROVING



FISH PASSAGE
BARRIERS REDUCED



GUNNERA
SPREAD CONTAINED



MORE CONNECTED
FRESHWATER HABITATS



INCREASED
NATIVE FISH PRESENCE



STRONG CATCHMENT
PARTICIPATION
AND LEADERSHIP



Shared kaitiakitanga

A SHARED GOAL FOR THE AWATUNA – PIHAMA GROUP



Improving water quality in the Awatuna- Pihama will only succeed if it is carried by the people who live, farm and care for this catchment. Every on farm action, every water quality result shared, every monitoring site maintained and every farmer involved adds to the wider improvement effort.

This strategy builds on work already underway and the commitment of local farmers. It brings this work together into a shared direction: Understand the catchment. Restore ecological connections. Protect gains through coordinated invasive species management.

TAKE THE NEXT STEP

Want to be part of the catchment group?

Work with your catchment coordinator or Taranaki Catchment Communities to identify where your effort can contribute most, whether that is sharing farm knowledge, hosting a demonstration site, joining monitoring, managing a critical source area, planting, or helping build the next stage of catchment action.

Read the full TCC Strategy to see how this work connects with wider catchment priorities and locally-led action across Taranaki.

