



Northland Climate Resilient Communities Fund – Measuring impact (SROI)

Northland Regional Council

August 2026



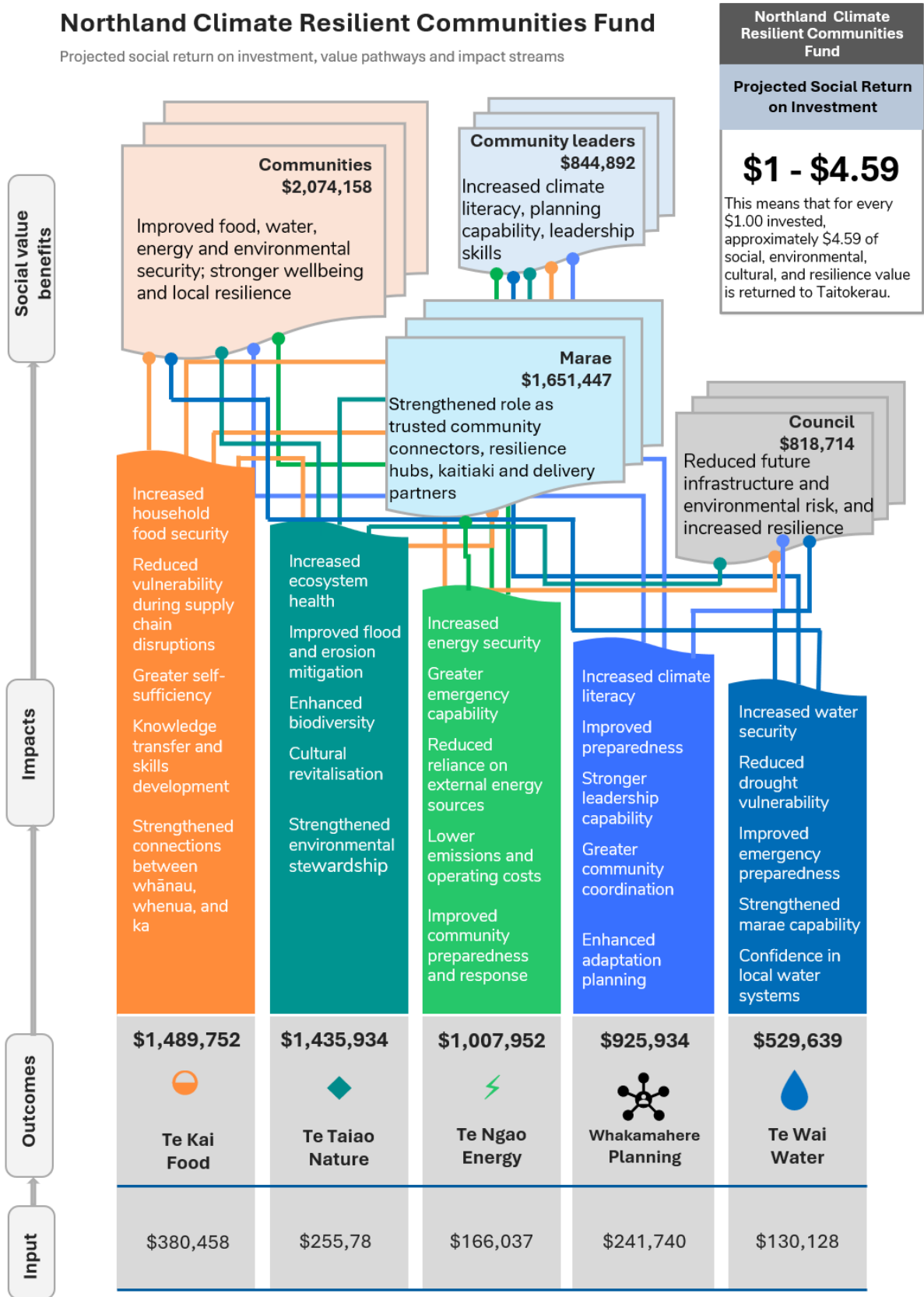
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Executive summary



Executive Summary

The assessment of the Northland Regional Council's (NRC) Climate Resilient Community Fund indicates that investments in community resilience have generated benefits that extend beyond the original grant investment, particularly where projects strengthened local capability, preparedness, and self-reliance. Since inception, the Fund has invested **\$1.17 million across 44 community-led projects** spanning food resilience, water security, renewable energy, environmental restoration, and climate preparedness.

For every \$1 invested, the Fund generates an estimated \$4.59 in value

This programme-level Social Return on Investment (SROI) assessment estimates that the Fund generates approximately \$4.59 in social, environmental, cultural, and resilience value for every \$1 invested by NRC, creating an estimated \$5.39 million in total value for Taitokerau.

To test the robustness of this result, sensitivity analysis was undertaken using more conservative assumptions about the scale and duration of project benefits. Under these conservative scenarios, the estimated return ranged from \$4.00 to \$4.36 for every \$1 invested. While lower than the base-case estimate of \$4.59, these results demonstrate that the Fund continues to generate substantial value even when key assumptions are made less favourable.

The findings should be interpreted as a conservative programme-level estimate based on reported project outputs, financial proxies, and standard SROI impact adjustments. The result provides a credible indication of the scale and direction of value created across the Fund rather than a precise valuation of every individual project.

The assessment identified value across the five resilience streams, food resilience (Te Kai), water resilience (Te Wai), energy resilience (Te Ngao), nature-based resilience (Te Taiao), and planning and education resilience (Ngā Mahi Whakamahere), with many projects contributing to more than one area of resilience.

The programme has delivered practical assets including water tanks, solar power systems, māra kai, orchards, resilience planning initiatives, and environmental restoration projects. At the same time, it has strengthened local leadership, mātauranga Māori, emergency preparedness, environmental stewardship, community capability, and social connectedness. These social, cultural, and environmental benefits are as important as the physical infrastructure delivered through the Fund.

Importantly, the Fund's value lies not in any single project, but in the way investments reinforce one another. Food security, water security, energy resilience, ecosystem restoration, and community capability combine to create stronger, more self-reliant, and more adaptable communities.

Value is generated across multiple stakeholder groups. Communities benefit through improved wellbeing and resilience; marae and hapū through strengthened capability, self-sufficiency, and cultural resilience; community leaders through increased knowledge and leadership; and NRC through strengthened community relationships, environmental, and emergency management pressures.

The analysis suggests that community-led climate resilience investments are likely to generate benefits that exceed the original investment. Even under conservative assumptions, the programme generates approximately four dollars of social, environmental, cultural, and resilience value for every dollar invested, supporting a more resilient, connected, and thriving Taitokerau.

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1 Introduction

Northland Regional Council's (NRC) Climate Resilient Communities Fund (the Fund) is a strategic investment mechanism designed to strengthen long-term resilience to climate impacts across Taitokerau. The Fund supports small, community-led initiatives that enhance preparedness, build adaptive capacity, and strengthen local systems, rather than focusing solely on post-event recovery.

Council communications consistently describe the Fund as an investment in “our people and local systems”, recognising that effective climate resilience is grounded in community capability, connectivity, and local leadership. The Fund operates across five key domains of resilience: water, energy, food, nature-based systems, and planning for resilience.

Reporting indicates that, as of March 2026, the Fund has supported 44 projects since inception, with a total investment of nearly \$1.2 million across its first two funding rounds. These projects span diverse geographies and resilience pathways, reflecting the Fund's broad and integrated approach.

This report provides a comprehensive Social Return on Investment (SROI) assessment of the Fund. It draws together the programme's strategic intent, theory of change, evidence base, valuation framework, and results into a single, coherent narrative. The objective is to provide a transparent, defensible account of the value generated by the Fund and to support both governance decision-making and public accountability.

1.1 Purpose

The purpose of this report is to estimate the social, environmental, cultural, and economic value generated by the Fund since its inception.

Specifically, the report aims to:

- Provide a clear, evidence-based estimate of value for money
- Demonstrate how community-level investments translate into broader resilience outcomes
- Support NRC decision-making through a consistent and comparable value framework
- Communicate the Fund's contribution to stakeholders in a transparent and accessible manner.

The analysis complements broader evaluation approaches by translating multidimensional outcomes into a single value framework, while retaining visibility of the underlying drivers of impact.

1.2 Scope

Analytical scope: This analysis captures value experienced by a wide range of stakeholders, including communities, marae, hapū, whānau, and ecosystems, in addition to NRC. The evaluation covers all five Fund impact areas and aggregates outcomes across all funded projects. It reflects benefits over time, recognising that many resilience outcomes accrue over extended periods.

Timeline scope: The analysis is undertaken on a since inception basis, using the publicly reported total investment of about \$1.2 million across 44 projects.

Exclusions: The report does not include a full measured-quantity SROI for each individual project. While project-level data exists, it is not yet available in a standardised and comprehensive form across the portfolio. As a result, this analysis represents a programme-level estimate rather than a full bottom-up recalculation.

2 The bottom line

The SROI model estimates that the value associated with Fund-supported activities exceeds the original grant investment. Since inception, the Fund has allocated **\$1.174 million across 44 community-led projects**, supporting practical resilience initiatives across food, water, energy, nature-based systems, and resilience planning.

*The SROI assessment estimates that the Fund generates a **baseline social return of 4.59:1**. This means that for every **\$1.00 invested**, approximately **\$4.59 of social, environmental, cultural, and resilience value** is returned to Taitokerau.*

This return reflects more than avoided costs or direct economic benefits. It captures the value created when communities are better prepared, more self-reliant, better connected, and more able to respond to climate disruption. The Fund has supported physical assets such as water tanks, solar systems, food gardens, and restoration planting, while also strengthening less visible but equally important forms of resilience, including local leadership, mātauranga Māori, planning capability, emergency preparedness, and community confidence.

2.1 Headline SROI result

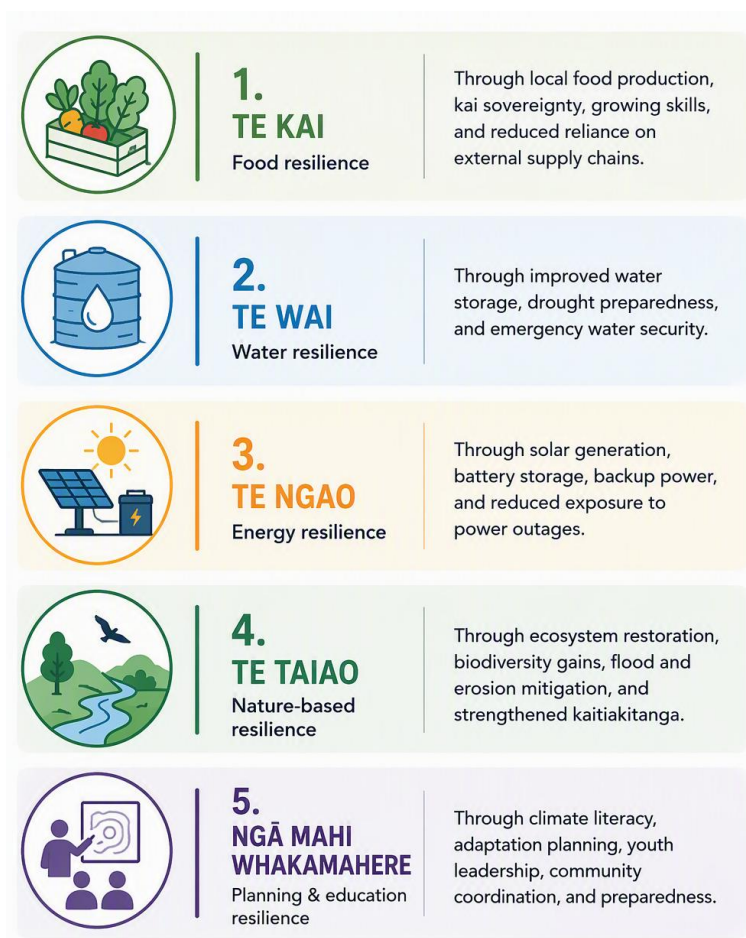
The Fund delivers a positive and defensible social return.

For every \$1.00 invested by NRC, the Fund generates an estimated \$4.59 in value for communities, whānau, hapū, marae, ecosystems, and future generations.

This result is based on a programme-level SROI model that aggregates outcomes across the five funded resilience streams. It is not a full project-level, stakeholder-verified SROI for each individual grant. Instead, the model uses reported outputs, modelled outcome pathways, financial proxies, and standard SROI deductions for deadweight, attribution, displacement, drop-off, and discounting to estimate the net value created across the Fund as a whole. The result should therefore be read as an indicative and conservative estimate of the scale and direction of value created, rather than a precise valuation of each funded project.

The total modelled net annual value generated across the five streams is estimated at **\$5.389 million**. This value is distributed across the Fund’s core resilience pathways:

Figure 1 Five resilience streams



2.2 Why the value is broader than the dollars

The Fund focuses on activities intended to improve preparedness and adaptive capacity before future disruption occurs. This is important in a region where communities face increasing exposure to drought, flooding, coastal erosion, power outages, infrastructure fragility, and supply chain disruption.

Many of the benefits created by the Fund are not easily captured through conventional economic measures. For example, the value of knowing that a marae has water storage, backup power, and the ability to support whānau during an emergency is not fully reflected in market prices. Nor is the value of strengthened community leadership, shared planning, youth climate literacy, or restored cultural and ecological relationships with whenua and wai.

The SROI framework provides a structured method for reflecting these outcomes within a common valuation framework. It translates different forms of benefit into a common value framework while still retaining the story of how value is created. This is particularly important for community resilience investment, where benefits are distributed across households, marae, hapū, schools, community organisations, ecosystems, and future generations.

The Fund also creates value through connection. Food, water, energy, environmental restoration, and planning are often treated as separate areas of investment. In practice, they reinforce one another.

A marae with solar power, water storage, kai production, and a community response plan becomes more than a funded project site. It becomes part of a wider resilience network.

A restored wetland or dune system is not only an environmental project. It can reduce risk, support biodiversity, protect cultural sites, and provide a platform for education and community action.

The interaction between projects is an important consideration in understanding the overall value generated by the Fund. The return is not only generated by individual projects but also by the way those projects strengthen the wider resilience fabric of Taitokerau.

3 Why this Fund matters

3.1 Strategic positioning

The Fund sits at the centre of NRC's approach to building climate resilience across Northland. Council strategies emphasise proactive adaptation, equity, sustainability, and community empowerment.

Rather than prioritising large-scale infrastructure alone, the Fund recognises that resilience is built through distributed, community-level systems and capabilities. This includes strengthening local networks, enhancing knowledge and skills, and enabling localised solutions to climate challenges.

3.2 Scale and reach

Since inception, the Fund has supported 44 projects across the region. These include projects in the Far North, Whangārei, Kaipara and region-wide initiatives. This distribution demonstrates both geographic coverage and diversity of activity, contributing to region-wide resilience outcomes.

3.3 Nature of funded activities

Funded initiatives cover a wide spectrum of activities, including:

- Food sovereignty and local growing systems
- Community water supply and storage
- Renewable energy and solar installations
- Coastal, dune, and ecological restoration
- Community resilience education and planning.

These activities are multi-dimensional in their impacts, generating not only functional infrastructure outcomes but also capability, cultural, social, and environmental benefits.

4 How the Fund creates value

The NRC Climate Resilient Communities Fund supports community-led initiatives that strengthen resilience to climate change. Through funding, technical support, local knowledge, marae infrastructure, and volunteer effort, the Fund acts as a catalyst for communities to develop and implement local solutions.

Funded activities include capacity building; community resilience planning; implementation of projects across food, water, energy, environmental restoration, and climate action; as well as community engagement and awareness raising. These activities generate tangible outputs, such as community resilience plans; improved access to sustainable food, water, and energy systems; ecosystem restoration; and increased participation in resilience initiatives.

Over time, these outputs contribute to stronger outcomes for Northland communities. Communities become better equipped to identify and manage climate risks, vulnerable populations experience greater water and energy security, and the transition to a low-emissions future is more equitable. The Fund also encourages lasting behavioural change by supporting more sustainable and circular practices across the region.

At the highest level, the Fund contributes to Kia Manawaroa Taitokerau: a Northland where communities are connected, prepared, adaptable, and thriving. It supports progress toward a net-zero emissions future by 2050, while enhancing environmental sustainability, reducing future disaster recovery costs, and strengthening intergenerational resilience and well-being.

Underlying principle: *Resilience is strongest when it is built locally. By investing in community systems, capability, and relationships, the Fund helps Northland communities absorb, adapt to, and recover from climate impacts while creating lasting social, environmental, cultural, and economic benefits.*

5 Building resilience from the ground up

Climate resilience is often associated with large-scale infrastructure investments. While these investments remain important, the Fund is based on a different but complementary premise that communities are more resilient when they possess the local capability, knowledge, infrastructure, relationships, and leadership required to prepare for, adapt to, and recover from disruption.

The Fund therefore invests in community-led initiatives that strengthen resilience at multiple levels. Some projects deliver physical assets such as water tanks, solar installations, community gardens, or ecological restoration. Others build less tangible but equally important forms of resilience, including local leadership, community networks, planning capability, mātauranga Māori, environmental stewardship, and preparedness for future climate impacts.

When viewed collectively, however, these investments contribute to a broader system of resilience across Taitokerau. The Fund strengthens the ability of communities to anticipate risks, respond effectively to shocks, and recover more quickly from climate-related disruptions. To understand how this value is created, the evaluation applies a theory of change that links Fund investments to longer-term impacts.

5.1 Theory of change

The Fund creates value through a sequence of interconnected stages.

Figure 2 Climate Resilient Communities Fund – Theory of change



5.1.1 Inputs

The Fund begins with a combination of financial resources, technical expertise, local knowledge, and community commitment.

Key inputs include:

- NRC funding
- Technical support and programme administration
- Local leadership from marae, hapū, iwi, schools, trusts, and community organisations
- Volunteer effort and community participation
- Mātauranga Māori and local knowledge
- Existing community facilities and infrastructure, particularly marae and community hubs.

5.1.2 Activities

These inputs enable a broad range of resilience-building activities across the Fund's five investment streams:

- Food resilience initiatives (Te Kai)
- Water resilience initiatives (Te Wai)
- Energy resilience initiatives (Te Ngao)
- Nature-based resilience initiatives (Te Taiao)
- Planning, education, and leadership initiatives (Ngā Mahi Whakamahere).

Activities include establishing māra kai and food forests, installing water storage infrastructure, deploying solar generation systems, restoring ecosystems, undertaking climate planning, and delivering community education programmes.

5.1.3 Outputs

These activities generate tangible and measurable outputs that provide the foundation for longer-term impact.

Examples include:

- Water tanks and emergency water storage

- Solar panels, batteries, and renewable energy systems
- Food forests, orchards, and community gardens
- Wetland restoration, dune stabilisation, and planting programmes
- Community resilience plans
- Workshops, wānanga, training, and educational initiatives
- Volunteer participation and learning opportunities.

5.1.4 Outcomes

Over time, these outputs generate broader resilience outcomes for communities.

These include:

- Increased food, water, and energy security
- Strengthened emergency preparedness
- Improved environmental health and natural protection against climate risks
- Enhanced climate literacy and leadership capability
- Stronger community connections and local support networks
- Greater self-reliance and adaptive capacity
- Increased confidence in responding to future climate challenges.

5.1.5 Impact

Collectively, these outcomes contribute to the Fund's overarching objective:

A resilient, connected, adaptable, and thriving Taitokerau.

At this level, the Fund contributes to stronger communities, reduced vulnerability to climate-related disruption, enhanced well-being, improved environmental outcomes, and greater intergenerational resilience. The cumulative effect is a region that is better prepared for future climatic, environmental, and social challenges.

5.2 A systems approach to resilience

A key feature of the Fund is that it does not treat resilience as a collection of stand-alone projects. Food resilience supports community well-being during disruptions. Water and energy infrastructure strengthen the ability of marae and community facilities to act as emergency hubs. Environmental restoration reduces exposure to flooding, erosion, and ecosystem decline. Education and planning initiatives improve preparedness and coordination. Together these investments reinforce one another and contribute to a broader resilience system.

This interconnected nature of the Fund is important because many of the most significant benefits arise not from individual assets alone, but from the relationships, capabilities, and networks that these projects help create and strengthen.

5.3 Measuring value creation

The following chapters examine how each of the five funding streams contributes to the Fund's overall theory of change. For each stream, we consider:

1. What was funded
2. What was delivered
3. Who benefited
4. What outcomes were created
5. How those outcomes contribute to the Fund's overall SROI.

This structure allows individual projects to be understood within a wider resilience framework and demonstrates how community-led investment contributes to long-term value creation across Taitokerau.

6 What changed across the value streams

6.1 Introduction

The Fund creates value through five interconnected resilience pathways: food, water, energy, nature-based resilience, and planning and education. Together these pathways strengthen Northland's ability to anticipate, adapt to, and recover from climate-related disruption.

The following sections demonstrate how investments have translated into measurable outputs, community outcomes, and long-term resilience benefits. Each stream is considered through a common framework:

- What was invested
- What changed
- Why it matters
- How value was created
- Community perspectives.

6.2 Food resilience (Te Kai)

What was invested

The Fund supported 13 food resilience projects focused on food sovereignty, māra kai, orchards, food forests, community food networks, and kai systems planning. Projects were delivered by marae, trusts, schools, and community organisations across Tai Tokerau.

What changed

Project reporting indicates increased food production activity, community participation, and food-growing capability.

Key outputs included:

- 113 fruit trees planted
- 2,000kg of heritage Māori potatoes produced
- Community food gardens established
- 966 hours of learning, training, and participation delivered.

Why it matters

Food security is a critical component of climate resilience.



The projects reduced dependence on external supply chains while increasing access to affordable and nutritious kai. They also strengthened mātauranga Māori, local growing knowledge, and intergenerational capability.

How value was created

Value was generated through:

- Increased household food security
- Reduced vulnerability during supply chain disruptions
- Greater self-sufficiency
- Knowledge transfer and skills development
- Strengthened connections between whānau, whenua, and kai.

Community perspectives

"The orchard will continue to serve as a source of kai, a learning space for whānau and tamariki, and a practical example of climate resilience."

"During recent weather events, roads were closed and our hāpori was cut off from supermarkets. We were able to mobilise access to kai that has been grown locally and trialled the systems we've set up for self-reliance."

Common themes: Food sovereignty, self-sufficiency, intergenerational learning, and reconnection to whenua.

6.3 Water resilience (Te Wai)

What was invested

Six projects strengthened local water security through water storage, water supply investigations, rainwater harvesting, and community education.

What changed

Key outputs included:

- 13 large water tanks installed
- Water supply assessments undertaken
- Community water planning initiatives established
- Water conservation training delivered.

Why it matters

Water is one of the most immediate climate resilience challenges facing many Northland communities.

Water storage and planning initiatives are expected to improve resilience during droughts, supply interruptions, and emergency events.

How value was created

Value was generated through:

- Increased water security
- Reduced drought vulnerability
- Improved emergency preparedness
- Strengthened marae capability as resilience hubs
- Greater confidence in local water systems.

Community perspectives

What communities told us

"It supports marae to act as emergency hubs during droughts, water outages, and Civil Defence events."

"Securing a reliable water supply is essential for future community resilience."

Common themes: Emergency preparedness, local control, security, and self-reliance.

6.4 Energy resilience (Te Ngao)

What was invested

Five projects invested in solar generation and battery storage systems at marae, schools, and community facilities.

What changed

Key outputs included:

- 100 solar panels installed
- 11 battery systems installed
- Backup power capability established
- Renewable energy generation increased.

Why it matters

Solar and battery systems provide additional capacity that may help maintain essential services during power outages.

How value was created

Value was generated through:

- Increased energy security
- Greater emergency response capability
- Reduced reliance on external energy sources
- Lower emissions and operating costs
- Improved community preparedness.

Community perspectives

What communities told us

"Our vision... is to empower and equip people to be able to practice renewable energy regeneration both for their personal interest and as a possible career pathway."

"This investment strengthens long-term resilience for future generations."

Common themes: Energy independence, preparedness, sustainability, and community leadership.

6.5 Nature-based resilience (Te Taiao)

What was invested

Ten projects invested in ecosystem restoration, dune stabilisation, wetland restoration, biodiversity enhancement, and environmental education.

What changed

Key outputs included:

- 4,440 native trees planted
- 1,250 additional plants established
- 61 hectares restored or planned for restoration
- Thousands of volunteer- and learning-hours contributed.

Why it matters

Restored ecosystems can contribute to erosion control, biodiversity protection, and reduced exposure to some environmental risks.

How value was created

Value was generated through:

- Increased ecosystem health
- Improved flood and erosion mitigation
- Enhanced biodiversity
- Cultural revitalisation
- Strengthened environmental stewardship.

Community perspectives

What communities told us

"This restoration is about more than carbon. It restores mauri, protects culturally significant places, and strengthens community capability."

Common themes: Kaitiakitanga, ecosystem resilience, cultural restoration, and long-term stewardship.

6.6 Planning and education resilience (Ngā Mahi Whakamahere)

What was invested

Ten projects supported climate literacy, adaptation planning, leadership development, community engagement, and resilience education.

What changed

Key outputs included:

- Hundreds of people engaged in resilience planning
- Thousands of learning and volunteer hours
- Community adaptation initiatives developed
- Leadership capability strengthened.

Why it matters

Community preparedness is influenced by access to information, planning processes, and local leadership capability.

How value was created

Value was generated through:

- Increased climate literacy
- Improved preparedness
- Stronger leadership capability
- Greater community coordination
- Enhanced adaptation planning.

Community perspectives

What communities told us

"Build community capacity to observe, interpret, and respond to environmental change."

"Simple, low-cost actions build momentum."

Common themes: Knowledge, leadership, empowerment, and collective action.

6.7 How benefits were created across the stakeholder groups

The main stakeholders in the Fund are:

- Communities
- Marae and hapū
- Community leaders
- NRC.

The Fund creates value for multiple stakeholders simultaneously (Table 1). While communities receive the largest share of benefits, almost half of the total value accrues to marae, hapū, community leaders, and NRC, highlighting the Fund's role in strengthening both physical resilience assets and the wider social, cultural, environmental, and governance systems that support climate resilience across Taitokerau.

Table 1 Benefits to stakeholder groups across the resilience streams

Resilience stream	Primary beneficiaries	Main benefits created
Food resilience (Te Kai)	Communities, marae, and hapū	Food sovereignty, local food production, reduced dependence on external supply chains, intergenerational knowledge sharing, and improved household resilience.
Water resilience (Te Wai)	Communities, marae, and hapū	Increased drought preparedness, emergency water security, water supply resilience, and reduced vulnerability during climate-related disruptions.
Energy resilience (Te Ngao)	Communities, marae, and hapū	Reliable power during outages, reduced energy costs, improved emergency response capability, and increased energy independence.
Nature-based resilience (Te Taiao)	Communities, NRC, marae, and hapū	Biodiversity gains, flood, and erosion mitigation, ecosystem restoration, stronger kaitiakitanga, and reduced environmental risk.
Planning and education resilience (Ngā Mahi Whakamahere)	Community leaders, communities, NRC	Climate literacy, resilience planning, leadership development, stronger community coordination, and improved preparedness.

Source: BERL analysis

7 Methodology

This assessment uses a desktop SROI approach to estimate the value created by the Fund. The analysis is programme-level, not a full bottom-up evaluation of every individual project. It brings together reported project outputs, stream-level assumptions, financial proxies, and standard SROI impact deductions to estimate the net value generated by the Fund.

The assessment covers the total allocation to date of \$1,174,071 across 44 community-led projects in Taitokerau. Primary data collection with all funded groups was outside scope, so the analysis relies on funding applications, milestone information, accountability reporting, and available public-sector valuation sources.

7.1 Interpreting the programme-level SROI model

The SROI model distinguishes between reported outputs, modelled outcomes, and financial proxies. Reported outputs include tangible deliverables such as water tanks, solar panels, trees planted, kai produced, workshops delivered, and resilience plans developed. These outputs are not treated as the full value of the Fund in themselves. Rather, they are used as evidence that broader outcome streams have been activated.

Modelled outcomes reflect the changes these outputs are expected to contribute to, including improved food, water, and energy security, stronger emergency preparedness, increased community capability, enhanced ecological resilience, reduced vulnerability, and improved well-being.

Financial proxies are then applied to these outcome streams to provide a conservative estimate of value. The proxies are not intended to put a market price on culture, community, or environmental relationships. They provide a transparent way to represent avoided costs, replacement costs, preparedness value, resilience value, and well-being value using available data.

This means the headline SROI ratio should be interpreted as a programme-level estimate of value created across the Fund, not as a measured valuation of each individual project.

7.2 How projects were grouped

The 44 projects were grouped into five outcome streams that reflect the Fund's investment logic and the way resilience value is created (Table 2).

Table 2 How projects were grouped

Stream	Allocation	Asset or outcome base used in the model
Food resilience (Te Kai)	\$380,458	Māra kai, orchards, food forests, kai networks, at least 2,000 kilograms of kai produced, 113 fruit trees, 104 berry bushes, 160 vegetable and herb plants, and learning participation.
Water resilience (Te Wai)	\$130,128	13 localised 25,000 litre emergency rainwater tanks and related water planning or assessment activity.
Energy resilience (Te Ngao)	\$166,037	100 solar panels and 11 battery storage systems supporting schools, marae, and community hubs.
Nature-based resilience (Te Taiao)	\$255,708	Wetland, dune, riparian, and ecological restoration, including around 60 hectares restored or planned, 4,440 trees, and 1,250 plants.
Planning and education resilience (Ngā Mahi Whakamahere)	\$241,740	Hapū and community response planning, climate literacy, training, engagement, and capability-building activity.

Source: BERL analysis

7.3 How value was estimated

The model uses financial proxies to translate non-market outcomes into dollar values. These proxies are not intended to price culture, community, or the environment directly. They provide a conservative way to represent the avoided costs, replacement costs, preparedness value, and well-being value created by the Fund.

- Water resilience was valued using a material and cost-avoidance proxy linked to water storage and water delivery alternatives
- Energy resilience was valued using avoided disruption from outages, informed by the Value of Lost Load for rural electricity networks
- Food resilience was valued using household food expenditure as a proxy for local kai production and improved food security
- Nature-based resilience was valued using avoided infrastructure repair and risk-reduction logic linked to flood attenuation, erosion mitigation, and ecosystem restoration

- Planning, education, and peace of mind were valued using a conservative household preparedness proxy that reflects the value of local shelter, backup utility access, and community support networks.

7.4 Impact accounting

The model applies standard SROI deductions to avoid overclaiming the Fund's contribution. These deductions convert gross value into net value. (See Appendix C)

- Deadweight removes the share of outcomes likely to have happened without the Fund
- Attribution removes the share of value created by other funders, organisations, volunteers, iwi, hapū, marae, central government agencies, or local partners
- Displacement accounts for any value that may shift activity rather than create additional benefit
- Drop-off reflects the gradual decline in benefits over time as assets age, activity levels change, or ongoing maintenance is required.

7.5 Time period and discounting

Net annual values were projected over a five-year benefit period. Water, energy, and food outcomes were assigned a five percent annual drop-off rate. Nature-based resilience outcomes were assigned a 10 percent annual drop-off rate to reflect ongoing maintenance and stewardship requirements.

Planning and education outcomes were not assigned drop-off because knowledge, plans, and capability are assumed to remain available across the assessment period.

Future values were discounted to present value using a five percent public-sector discount rate.

7.6 Cultural infrastructure and household well-being

The methodology recognises that resilience in Taitokerau is not only physical. Marae, hapū networks, whānau relationships, and local leadership are part of the resilience system. Water tanks, solar systems, kai systems, and community plans create value because they are embedded in places and relationships that can mobilise support when disruption occurs.

The household preparedness proxy, therefore, captures more than the presence of an asset. It reflects the value of knowing that local support, shelter, water, power, and coordination are available in an emergency. Attribution deductions are applied so the model does not overclaim NRC's role in value that is also created by the marae, ahi kā, volunteers, local committees, and existing whanaungatanga.

7.7 Limitations

This is a desktop assessment. It does not capture every benefit created by the Fund, and it does not measure every outcome directly at project level. Some values were estimated using reported activity, project descriptions, comparable activities, and conservative assumptions.

The main limitations are the following:

- Learning and volunteer hours were not consistently reported across all projects
- Land areas were estimated in some cases where project boundaries were not fully specified
- Some projects were still in progress, so the model assumes that funded benefits have occurred or will occur soon
- Not every purchase, output, or outcome could be quantified
- The model estimates programme-level value and should not be read as a precise valuation of each individual project.

7.8 Confidence in the approach

The methodology is intentionally conservative. It uses standard SROI deductions, applies benefit drop-off over time, discounts future values, and avoids claiming full value where other actors contribute. This makes the estimate suitable for programme-level decision-making and public accountability, while still recognising that the Fund creates forms of value that conventional financial measures cannot quantify.

8 Sensitivity analysis

The sensitivity analysis tests how the estimated SROI changes when key assumptions are adjusted one at a time. This is important because the headline result is an indicative programme-level estimate rather than a fully measured project-level valuation. The base case estimates \$5.39 million in Social Present Value (SPV) from \$1.17 million of NRC investment, producing an estimated SROI of approximately 4.59:1 (Table 3). This means every \$1 invested is estimated to generate about \$4.59 of social, environmental, cultural, and resilience value.

Table 3 Base case results

Metric	Base result
Total SPV	\$5,389,212
Total NRC investment	\$1,174,071
SROI ratio	4.59:1
Discount rate	Five percent
Year 1 net annual value	\$1,539,540

Source: BERL analysis

Reading the result: *The 4.59:1 ratio is an indicative programme-level estimate. It reflects modelled social, environmental, cultural, and resilience value across the Fund, after standard SROI deductions. It should not be interpreted as a precise valuation of each project or each physical output.*

8.1 Sensitivity results

The results of the sensitivity testing are summarised in Table 4. The sensitivity results demonstrate that the model remains robust under less favourable assumptions. Even in the most conservative scenarios tested, the SROI remains approximately 4:1, indicating that the programme continues to generate substantially more value than the original NRC investment.

The largest impacts arise from changes in deadweight and attribution assumptions. This is expected because the programme operates within a wider ecosystem of community organisations, marae, hapū, volunteers, and partner agencies. Increasing either assumption reduces the share of outcomes attributable to the Fund and therefore lowers the estimated return.

Table 4 Sensitivity analysis results

Scenario	SROI result	Change in SPV	Interpretation
Base case	4.59:1		Current assumptions
Deadweight higher	4.00:1	-\$688,578	More value assumed to happen anyway
Attribution higher	4.01:1	-\$678,676	More value credited to other contributors
Drop-off higher	4.23:1	-\$427,437	Benefits decay faster over time
Discount rate higher	4.23:1	-\$420,296	Future benefits discounted more heavily
Displacement higher	4.36:1	-\$273,381	More value assumed to shift activity elsewhere

Source: BERL analysis

8.2 Stream contribution

Value is spread across all five streams. Food and nature-based resilience contribute the largest share of total value, while energy resilience the highest stream-level SROI (Table 5).

Table 5 Stream contribution

Stream	(SPV) (\$)	Share of total SPV (%)	Stream SROI
Food resilience (Te Kai)	\$1,489,752	27.6	3.92:1
Nature-based resilience (Te Taiao)	\$1,435,934	26.6	5.62:1
Energy resilience (Te Ngao)	\$1,007,952	18.7	6.07:1
Planning and education resilience (Ngā Mahi Whakamahere)	\$925,934	17.2	3.83:1
Water resilience (Te Wai)	\$529,639	9.8	4.07:1

Source: BERL analysis

8.3 Interpretation

The Fund remains strongly positive under more conservative assumptions. The most important assumptions are deadweight and attribution, which is appropriate for a community resilience fund where value is created through NRC funding, marae and hapū leadership, volunteer effort, community delivery, and other partner contributions.

Overall, the sensitivity testing supports the conclusion that the Fund delivers a positive and defensible return on investment. The result is not dependent on one stream, one proxy, or one assumption. It reflects a balanced portfolio of value across all five streams and remains positive when more conservative assumptions are applied. This strengthens confidence that the headline ratio is useful for understanding the scale and direction of value created, while still recognising the limits of a programme-level SROI estimate.

Appendix A Allocated funding

A total of 44 project, with a collective value of \$1,174,071 has been allocated. The following projects have been successfully allocated funding under the scheme, covering:

- Food resilience initiatives (Te Kai) (Table 6)
- Water resilience initiatives (Te Wai) (Table 7)
- Energy resilience initiatives (Te Ngao) (Table 8)
- Nature-based resilience initiatives (Te Taiao) (Table 9)
- Planning, education, and leadership initiatives (Ngā Mahi Whakamahere) (Table 10).

This information was provided by the Northland Regional Council.

Food resilience (Te Kai)

Table 6 Food resilience (Te Kai) projects

Application	Project title	Project description	Grant
Āteanui Limited	Peruperu Rawa	A deeply rooted, kaupapa Māori-led approach to kai resilience that revitalises traditional growing systems for peruperu (heritage Māori potato). With strong community backing and leadership it offers immersive wānanga to reconnect people of the hāpori with once thriving food-growing practices. The vision is for Kaikohe, Ngāwha, and the Hokianga to again be flourishing in mahinga kai, building resilience to the changing climate in Taitokerau.	\$40,000
Climate Change Taitokerau Northland Trust	Food Web (Stage 2 Kai Strategy)	Stage 2 of work on a Northland food system that brings together stakeholders to create an inclusive plan, addressing challenges, leveraging opportunities, and driving action towards a regenerative food system for Taitokerau.	\$20,000

Application	Project title	Project description	Grant
Maungaturoto Residents' Association	Maungaturoto Edible Village Project	Promoting intergenerational learning, the project fosters a culture of local action and provides a foundation for long-term community resilience and adaptation. It deepens local food resilience through events, workshops, resilience mapping, and storytelling, transforming public spaces into food-producing areas for community benefit.	\$20,000
ōNuku Aotearoa	Toihuarangi	The Regenerative Orchards program is establishing as a self-sustaining output of ŌNuku Aotearoa's social enterprise, Nukurei Nursery, where this business will generate the revenue for the support of an expanding network of local food systems and orchards.	\$40,000
Te Kura o Ōmanaia	Te toitūtanga kai ki Ōmanaia	A movement to restore food sovereignty and sustainability in Taitokerau by revitalising traditional Māori food practices. Using mātauranga Māori and intergenerational knowledge sharing to help whānau, hapū, and communities become self-sufficient and climate resilient.	\$9,000
Tree Born Forests	Food Forest 'Seed Blocks' for communities	Through the establishment of intensive, biodiverse food forest 'seed blocks' that focus on syntropic agriculture and climate resilience, workshops, training, and mentoring will empower communities to grow their own food while restoring ecological function.	\$21,500
Te Maire Whānau/Raukura Creative Ltd	Whānau-Led Fruit Orchard Development	Establishment of a fruit orchard on whenua to support the hau kāinga and to complement the construction of neighbouring marae build to enhance community's food sovereignty by diversifying sources of kai.	\$30,000

Application	Project title	Project description	Grant
Te Paatu ki Kauhanga Trust Board	Kāmeheameha	Promotion of sustainable food practices through workshops combining mātauranga Māori, organic methods, and indigenous resilient species. The Kauhanga Maara Project was established to support community food security, climate resilience, and the revitalisation of mātauranga Māori by developing a māra on ancestral whenua. Promotion of sustainable food practices through workshops combining mātauranga Māori, organic methods, and indigenous resilient species.	\$40,000
Hokianga Community Educational Trust	He Kete Kai o Hokianga – Future Proofing our Hokianga Food Systems	He Kete Kai o Hokianga: Future Proofing Hokianga Food Systems strengthening a kai resilience network in South Hokianga across Waimamaku, Opononi, Whirinaki, and Rawene.	\$36,786
Whakaora Kai Food Rescue Northland Limited	Kai Connections, Sustainability, and Resilience	Development of a Stakeholder Activation Plan to raise awareness of the organisation's work on kai resilience and greenhouse gas (GHG) emissions reduction to further participation in this mahi.	\$15,000
Whenua Warrior Trust on behalf of Ricco Tito	Taiao Kaitiaki Oranga ō te Waīma	Trial model of food production and distribution within a community utilising local indigenous knowledge.	\$30,000
Matatina Marae Trust	Matatina Kai Whenua – Community garden at marae for self- sufficiency	Matatina Kai Whenua: Establishment of the huarākau māra and, facilitate educational experience and strategies for utilising whenua to provide kai resilience.	\$25,847
Climate Change Taitokerau Northland Trust	Kai Sovereignty Strategy	Interview key Northland food system stakeholders, intending to mobilise this community to collectively drive the development of a regional kai sovereignty strategy, fundamental for transformational change.	\$20,000
Te Pokapu Tiaki Taiao O Te Tai Tokerau Trust	Tuituia Te Kahunuku and Food Resiliency	Tuituia Te Kahunuku and Food Resiliency: Building nature-based resilience through the restoration of public spaces trialling native rongoa and kai plant species in vulnerable areas.	\$32,325

Water resilience (Te Wai)

Table 7 Water resilience (Te Wai) projects

Application	Project title	Project description	Grant
He Kete Kai – Hokianga Community Educational Trust	He Kete Kai o Hokianga	Delivers practical workshops on water conservation, rainwater harvesting, and adapting traditional practices to strengthen community resilience to droughts, floods, and climate change.	\$20,000
Te Whānau a Te Hinetapu	Te Waiora o Pataua	Surveys local aquifer to secure sustainable groundwater supply, enabling informed water management and planning for future growth, and whānau returning to the land.	\$30,000
Te Runanga o Ngāti Hine Trust	Tanks a lot	Installation of water tanks at marae in vulnerable communities, building local water resilience, and supporting an additional programme that will enable access to water by hapori most in need.	\$40,000
Oromahoe 18R2B2B2 Trust	Te Wai Ora, Te Whenua Ora: Oromahoe Water Feasibility Study	Te Wai Ora, Te Whenua Ora: Oromahoe water supply investigation and feasibility study.	\$25,000
Morehu Marae Committee	Water tank replacement at marae	Improving water resilience in a remote community vulnerable to climate impacts. Inadequate water infrastructure.	\$7,128
Te Hapua Sports and Recreation Club	Water Resilience	Water resilience for vulnerable, end of road community to build resilience in a climate impacted area.	\$8,000

Energy resilience (Te Ngao)

Table 8 Energy resilience (Te Ngao) projects

Application	Project title	Project description	Grant
Dargaville Intermediate School	Energy Resilience Project	Solar installation providing energy resilience for the kura and its community spaces, teaching tamariki about sustainability, and modelling a climate resilient future grounded in mātauranga Māori.	\$40,000

Ōwhata Marae	Ōwhata Marae Solar Power Project	Installs solar and battery systems to provide clean, reliable energy, reduce carbon emissions, and support cultural resilience, water security, and climate adaptation planning.	\$40,000
Ngaitupoto Trustees Marae	Ngai Tupoto Marae – Solar System	Transitioning away from unsustainable generators with solar installation to build resilience and add to the work of Roopu 'Te Whakahaumarū', safeguarding well-being and safety.	\$35,000
Puketawa Marae	Solar Energy for marae resilience	Solar Energy for marae resilience and preparedness in vulnerable location.	\$26,037
Roma Marae	Te Ngao ki te Marae o Roma (Energy Resilience at Roma Marae)	Te Ngao ki te Marae o Roma (Energy Resilience at Roma Marae): Continuation of resilience-building kaupapa with installation of solar panels to support broader initiatives.	\$25,000

Nature-based resilience (Te Taiao)

Table 9 Nature-based resilience (Te Taiao) projects

Application	Project title	Project description	Grant
Haititaimarangai Marae 399 Trust	Tupehauora – Restoring Our Coastlines, Honouring Our Ancestors	Community-led initiative restoring coastal areas at Tokerau, Perehihi, Pātia, and Waikakari (Pūheke) where erosion has exposed kōiwi. It includes planting 5,000+ native trees, fencing, pest control, and education to protect cultural sites, restore dunes, and boost biodiversity. Through wānanga, training, and signage, the project deepens local knowledge and engagement. Guided by mātauranga Māori and climate science, Tupehauora strengthens climate resilience, reconnects people to whenua, and provides a replicable model for nature-based solutions.	\$40,000

Application	Project title	Project description	Grant
Arawai Limited	Ōkokori Wetland and Forest Restoration for Climate Resilience	Engages local community, hapū, and waka whānau to restore wetlands, regenerating bush, and mangroves across 115ha to enhance carbon sequestration and climate resilience. Building on existing investments (plant nursery, predator control, and Kupe Waka Centre's off-grid systems), the initiative strengthens mātauranga-led stewardship and horticulture training through NorthTec. Grounded in Kaupapa Māori and collective action, it empowers tangata whenua as kaitiaki responding to climate change.	\$40,000
Morningside School	A Water Resilience Powerhouse in the Urban Jungle	Through riparian planting near flood-prone commercial areas, it creates a living example of nature-based solutions. The initiative engages businesses, other schools, whānau, hapū, iwi, and environmental partners to co-create a thriving, sustainable ecosystem built on collective responsibility.	\$15,000
Patuharakeke Te Iwi Trust Board	Takahiwai 9B Marae Stream and Wetland Restoration	Explores the potential for coastal wetland restoration (mangroves, salt marshes, seagrass) to sequester carbon and deliver multiple benefits—biodiversity, water quality, storm protection, and cultural values. The research will estimate carbon storage capacity and inform a future restoration initiative to reduce climate impacts from sea-level rise, restore mauri, and establish pā harakeke, taonga kai species, and a thriving cultural landscape.	\$12,000

Application	Project title	Project description	Grant
WGHS, WBHS, Whangārei Intermediate, Whangārei Primary School	Waiarohia Stream Community Education, Engagement, and Resilience	Waiarohia Stream Collaboration brings together four Whangārei schools, iwi, community groups, and local government to investigate and engage on an urban waterway increasingly affected by storm events, flooding, and erosion. The project explores how climate change intensifies these impacts and works toward a shared vision with practical, nature-based solutions to build community resilience.	\$35,000
Coastal Restoration Trust of New Zealand	Taitokerau How to restore dunes video	Production of a 'how to' video focused on nature-based methods for local communities and iwi involved and interested in restoring and managing beaches and dune systems for the Northland region.	\$30,708
Pakanae 5A Trust	Cultural and Nature-Based Resilience Program for Pakanae 5A Ahuwhenua Trust	Community-led restoration of culturally significant land block in Hokianga, building ecological and cultural resilience while empowering the local community to take an active role in adapting to climate change.	\$30,000
Whakapara Marae Trust	“Te Taiao o ngā Waipukehia” (The land of the flooded waters)	Investigation to mitigate flooding through the restoration of river oxbows and wetlands, infrastructure improvements, and engagement.	\$30,000
Bream Bay Coastal Care Trust	Bream Bay Coastal Restoration Project	Training of local kaitiaki to remove exotic woody weeds, reducing wildfire risk, and improving dune health for coastal stability.	\$23,000

Education and planning for resilience (Ngā Mahi Whakamahere)

Table 10 Education and planning for resilience (Nga Mahi Whakamahere) projects

Application	Project title	Project description	Grant
Climate Club Aotearoa	Student Climate Action Workshops	High-impact, youth-led program designed to spark locally driven climate resilience projects across Taitokerau. Building on success in Tāmaki Makaurau, workshops empower students to understand climate science, assess local risks, and create action plans on themes like transport, kai, and social innovation. Targeting up to 12 schools, the initiative amplifies youth voice, fosters intergenerational engagement, and aligns with regional strategies, such as EnviroSchools and the Climate Action Conference.	\$32,900
Mangawhai Museum and Historical Society	Special Exhibition on Storms	Storytelling, education, and interactive exhibits to help residents prepare for extreme weather. Featuring local storm stories, practical tips, and bilingual resources, the mobile exhibition brings climate preparedness to schools and rural communities, blending mātauranga Māori with science to foster connection, cultural identity, and intergenerational learning.	\$35,000
Te Kohanga Reo O Manaakitia	Kia Manawaroa Te Kohanga Reo o Manaakitia	Natural hazards review of kohanga reo, considering future impacts of local natural hazards for future decision-making.	\$7,200

Application	Project title	Project description	Grant
PermaDynamics	Syntropic Agroforestry Research and Training	Research and education initiative focused on syntropic agroforestry. It trains rangatahi, farmers, and community groups in regenerative food-growing practices through internships, workshops, resources, and starter packs. By expanding trials to improve soil health, sequester carbon, and boost biodiversity, the project empowers communities to restore land, secure food systems, and build resilience to climate challenges.	\$28,500
Te Aho Taiao o Waimamaku	Te Mauri o te Taiao	Combines mātauranga Māori and science to monitor species and ecosystems, detect climate stress, and guide adaptive actions that protect biodiversity, food sources, and cultural practices in Taitokerau.	\$32,000
Ihirangi Trust	Te Aka Taiohi	Empower rangatahi Māori to create culturally grounded educational resources on climate resilience. Combining mātauranga Māori with technologies like drones and AI, rangatahi will document, and respond to, environmental changes in their rohe. This initiative promotes youth-led climate action, intergenerational knowledge sharing, and digital storytelling, laying the groundwork for scalable resilience projects across Northland.	\$15,000
Kaitaia Intermediate (funds to Sir Peter Blake Trust Ltd.)	Kaitiakitanga – Sustainable practices	Blake Virtual Reality session on climate change, increasing engagement and understanding of climate change with the use of innovative technology.	\$640
Rural Support Trust Northland	Rural Support Climate Resilience	Rural Support Climate Resilience: Our farmers and growers are in need of information to enable them to prepare for climatic challenge and change. Project to initiate a conversation with farmers about a changing climate in the rural sector and where the farming community want to focus efforts to build their resilience.	\$40,000

Application	Project title	Project description	Grant
Community Business Environment Centre	Hokinganui a Kai	A regional trial for a National Community Composting Project that will foster a network of local composters. This initiative, which is designed to be 100 percent locally owned, will enable individual communities of all sizes to provide solutions to recover compostable resources and provide this high-quality product to their community.	\$40,000
Opuawhanga Community Hall Trust	Resilience Network	Resilience planning for the community with engagement, strength identification hui, and capacity building initiatives.	\$10,500

Appendix B Methodology

Evaluation approach

This assessment uses a programme-level Social Return on Investment (SROI) framework to estimate the value generated through the Northland Climate Resilient Communities Fund.

The Fund supports a wide range of activities, including water infrastructure, renewable energy, food resilience initiatives, environmental restoration, community planning, and education programmes.

Because these projects generate different types of benefits, a common framework was required to assess the overall value created across the portfolio.

The objective of this assessment is not to produce a detailed SROI for every project. Rather, it provides an estimate of the value generated across the Fund as a whole and an indication of whether the benefits created exceed the original investment.

The assessment draws on project applications, funding information, accountability reporting, publicly available evidence, and established SROI valuation approaches.

Measuring outcomes

The first step was to identify the main outcomes expected to arise from funded activities.

Projects were grouped into five resilience streams:

- Food resilience (Te Kai)
- Water resilience (Te Wai)
- Energy resilience (Te Ngao)
- Nature-based resilience (Te Taiao)
- Planning and education resilience (Ngā Mahi Whakamahere).

Reported project outputs such as water storage, solar installations, food production initiatives, restoration activities, training programmes, and resilience planning activities were then linked to expected outcomes.

Examples of these outcomes include:

- Improved food security
- Increased water security

- Greater energy resilience during disruptions
- Improved environmental condition
- Increased preparedness and community capability.

Where direct outcome data was not available, reasonable and conservative assumptions were applied based on project documentation and comparable evidence.

Valuing outcomes

Many of the benefits generated by resilience investments do not have a market value. For example, preparedness during emergencies, improved community capability, stronger environmental stewardship, and increased confidence in local support networks are not typically reflected in market transactions.

To value these outcomes, financial proxies were used. These proxies provide an estimate of the value associated with changes in wellbeing, resilience, avoided costs, or reduced future risk.

Different valuation approaches were applied across the resilience streams. Food resilience outcomes were linked to household food expenditure and food security benefits. Water resilience outcomes were linked to avoided supply costs and improvements in emergency water availability. Energy resilience outcomes were linked to avoided disruption during power outages and increased reliability of essential services. Nature-based resilience outcomes were linked to environmental protection, risk reduction, and avoided future costs associated with flooding and erosion. Planning and education outcomes were linked to preparedness, community capability, and household wellbeing.

A conservative approach was adopted throughout the valuation process to minimise the risk of overstating benefits.

Impact adjustments

Standard SROI adjustments were applied to avoid over-claiming the Fund's contribution to outcomes.

Deadweight

Deadweight represents the proportion of outcomes that may have occurred without Fund support.

Attribution

Attribution reflects the role played by other organisations, funders, volunteers, marae, hapū, iwi, and community groups in generating outcomes.

Displacement

Displacement considers whether the benefits created in one area may have reduced benefits elsewhere.

Drop-off

Drop-off reflects the likelihood that benefits reduce over time as assets age or activity levels change.

These adjustments ensure the analysis estimates the net value created by the Fund rather than gross value.

The programmatic discounting formula

The Net Present Value (NPV) of the Fund's total social benefit is calculated as follows:

$$NPV = \sum_{t=1}^n \frac{(\text{Quantity} \times \text{Financial Proxy}) \times (1 - \text{Deadweight}) \times (1 - \text{Attribution})}{(1 + r)^t}$$

Where:

- r = 5.0 percent is the New Zealand Treasury Standard Discount Rate for public good projects
- t represents the specific outcome duration in years
- 'Quantity' defines the physical unit volume verified across the program footprint
- 'Financial Proxy' is the defensible non-market dollar valuation assigned per unit.

Timeframe and discounting

Benefits were projected over a five-year period and converted to present values using a five percent discount rate. This approach recognises that benefits occurring in future years are worth less than benefits received today and enables future outcomes to be compared with the original investment.

Social Present Value was calculated for each resilience stream and combined to estimate total programme value. The SROI ratio was then calculated by dividing total Social Present Value by the total value of Fund investment.

Limitations

This assessment is a programme-level estimate and should be interpreted accordingly. The analysis relies on project reporting and available evidence rather than direct measurement of all outcomes.

Not all projects reported outputs using the same measures, and in some cases, assumptions were required where complete information was not available.

Some projects were still underway at the time of assessment, meaning a portion of the estimated benefits has yet to be fully realised.

As a result, the findings should be interpreted as an indication of the scale and direction of value generated by the Fund rather than a precise valuation of every individual project.

Despite these limitations, the analysis provides a transparent and reasonable estimate of programme-level value and demonstrates how community resilience investments can generate benefits that extend beyond the original grant funding.

Appendix C Deadweight, attribution, and drop-off

Net Annual Values (NAV) assumptions and shares as follows:

Outcome stream	DW (%)	AT (%)	DP (%)	NAV	Methodological rationale and regional context
Water resilience (Te Wai)	10	20	0	\$149,918	Rationale: In isolated, low-decile rural patches of Northland, households face severe credit constraints; without this grant, 90 percent of these large-tank installations simply would not happen (low deadweight). We deduct 20 percent attribution to account for water delivery support and emergency logistics co-managed by Civil Defence or local marae committees during droughts.
Energy resilience (Te Ngao)	5	30	0	\$285,308	Rationale: Solar/battery retrofits on marae or remote community hubs have an exceptionally low deadweight (five percent), as these communities rarely have the capital liquidity to install commercial-grade storage independently. Attribution is set higher (30 percent) to recognise that iwi authorities, EECA, or local energy trusts frequently co-fund or provide technical deployment support.
Food resilience (Te Kai)	20	10	5	\$421,684	Rationale: Communal gardens or kai networks have a modest deadweight (20 percent) because committed volunteers often establish small plots regardless of formal funding. Attribution is low (10 percent) as these initiatives are largely community-led, while a small displacement factor (5%) reflects minor substitution of commercial food purchases.
Nature-based resilience (Te Taiao)	30	15	0	\$441,517	Rationale: Wetland, dune, and ecological restoration activities require structured funding for fencing, planting, and maintenance, resulting in moderate deadweight of 30% as other funding is used for the land. A 15% attribution deduction reflects contributions from DOC,

Outcome stream	DW (%)	AT (%)	DP (%)	NAV	Methodological rationale and regional context
					QEI Trust, landcare groups, and other environmental partners.
Ngā Mahi Whakamahere (Resilience planning)	30	25	0	\$241,114	Rationale: Communities often undertake basic emergency planning independently, resulting in higher deadweight. Attribution is also relatively high to reflect the role of National Emergency Management Agency (NEMA), Civil Defence, councils, and emergency management advisors in developing formal plans and protocols.
Total NAV				\$1,539,540	Includes the proportional allocation of education/capability and household well-being benefits across the five resilience outcome streams.

Source: BERL analysis