

Restoring the Moutere: Ridgetops to the Sea.



Vision

From the ridgetops to the sea, nurturing the mana and mauri of the Moutere estuary, its connected waterways, its biodiversity, and its people is our collective responsibility.

Purpose

To support the coordination of projects and initiatives that restore and replenish the life force and ecological health of the Moutere catchment in a way that enables connection and action of landowners, families and community groups

Approach

This plan aims to motivate, mobilise, encourage and align volunteer efforts through supporting action on the ground and being a voice for the Moutere Inlet and its surrounds. It is the work of a small group of local volunteers with a concern for the environment of the Moutere Inlet, contributing river and stream waterways and shorelines. There are opportunities for action in many locations. We aim to develop a coherent plan encompassing objectives that resonate with the local communities that will lead to more productive coherent effort. Many previous initiatives have been suggested and undertaken, and our aim is to build on the previous work and related work in nearby areas such as the Waimea inlet, Motueka Estuaries and Mapua and Moutere landowner catchment group. And this work will continue.

A long-term programme will require a more formal approach – developing that is part of this plan. Three years is an appropriate planning time frame in the first instance, with the emphasis on sound

organisation and practical implementation. At present several relevant strategies are being developed (e.g., Kotahitanga mo te taiao, NZ Biodiversity strategy – DOC, TDC biodiversity strategy). These have quite long development time scales. We need to be connected to their development, but we also need to make progress independently.

Who's involved?

The governance group is predominantly landowners of the Moutere with support from NZ Landcare Trust, Council Science staff and local schools and Tasman Environmental trust.

Why it is needed?

The Moutere inlet environment

The Moutere Inlet is a shallow tidal estuary (760 ha) surrounded by land developed for roads, horticulture, forestry and residential use. The development has led to the loss of original shorelines - the western side is bordered by SH 60 isolating most of the western bays (loops), loss of the original vegetation, and a general degradation in the overall environmental "quality" of the estuary. Measurements at selected sites for TDC SOE reporting (Stevens and Robertson, 2013) reveal high and increasing sediment content, reduced sediment oxygenation, nutrient enrichment and reduced biodiversity. There is another report out shortly from the same author on broad-scale mapping of the Inlet. There is also the likelihood of legacy pesticide residues, and pollutants from industrial plants and former Motueka and Tasman dump sites.

Despite the modification, the estuary is a significant feature of the district, is very accessible, attracts a variety of birdlife and provides an entrance to Motueka. There is a strategy in place for the inlet which we can build on.

The Moutere River Catchment

The Moutere River catchment is 14,680 ha with the majority in pasture (62%), exotic forest (24%) and horticulture 12%. Only 5% of the original wetlands on the flats remain. It has been the subject of a recent ecological and water quality survey (James, 2018). Sections of the river have been straightened and modified. Sediment in the river is an issue largely stemming from forestry harvesting in the upper reaches, land development (particularly large areas converted from pine forest to rural-residential from 2007) and stream bank erosion (Gibbs and Woodward, 2018). Lack of tree cover along the river is contributing to eroding banks, lack of shade, elevated water temperatures and growth of filamentous green algae and a predominance of pollution-tolerant macro-invertebrates. Low flow in the river during summer is also a significant issue. The Moutere River catchment is close to the sea and is important for native fish. Riparian planting could provide a biodiversity link between stands of remnant native forest in the catchment. Riparian planting is limited by the width of riparian margins and flood control practises. It is hoped that with this project compromises can be obtained that ensure both flood control, bank stabilisation and river ecosystem health.

The catchment includes other streams such as Tasman Valley Stream, Field Creek which also flow into the Moutere Inlet

With collective action we can create a river and Inlet that the Moutere community can be proud of for future generations.

Outcomes sought

- An estuary and surrounds whose environmental state is improving, leading to improved habitat, increased biodiversity, increased recreational opportunities and is valued by residents and visitors alike.
 - Water quality, is improving and healthy
 - Reduction of plastic in the waterways and estuary
 - Estuarine ecosystems/ecologies are restored and managed
 - Native species are thriving
 - Wild areas are preserved and increased
 - Wetlands are preserved and created
 - Land owners are motivated to give the sea and river space and protection, mitigate sedimentation and to encourage native wildlife and greater biodiversity
 - Land owners implement good environmental practises, reduce point source and critical source contamination of waterways and maintain economic businesses.
 - People of the Moutere are living in harmony with each other and are supportive of their environment
 - Moutere people are continually building capability to care for their environment
 - Moutere leaders are stepping forward and are supported
 - The youth of the Moutere are engaged in their environment and see it as a great place to live.

Objectives

Restore it, connect with it, maintain it. Into the future.

1 The health of the catchments of the Moutere and Inlet, as well as the inlet itself, from ridgetops to the sea is restored

- Undertake a landscape scale restoration plan for the Moutere
- Reduce flows of sediment into the waterways by promoting best management practises on forestry, horticulture, farming and lifestyle properties.
- Provide an opportunity for landowners to develop their own land and environmental management plans
- With the cooperation of landowners, and support from the community, waterways are fenced with a minimum of 5 m riparian margins on each side and planted (ideally at least 8-10m).
- Wetlands are protected, restored and created to filter and store water.
- Wetland resource consent exemplars are created to assist landowners in the resource consent process
- Flood control and bank protection is aligned with the goals of ecological health of the waterways
- Summer water flows of the Moutere River are increased by establishing wetlands and encouraging efficient use of water and where possible consideration is given to alternative stock water systems.
- Control of pest plants is undertaken to secure threatened flora and protect ecosystems

- Undertake restoration planting of appropriate species to create suitable habitat
- Control of predators to protect native fauna, particularly around the estuary margin and forest remnants.
- Secure roosting shorebirds sites.
- Restore and control weeds on land around the estuary and restore saltmarsh around the estuary margin.
- Work with central and local government and environmental agencies to complement their environmental initiatives

Indicators of success:

- Improved fresh water quality (reductions in water temperature, green filamentous green algae cover, sediment contamination, nutrient levels, *E. coli*. trends based on TDC river monitoring data compared to relevant national and regional limits), improved cultural health index).
- Land and environment plans (number)
- Uptake of improved good management practises by landowners (survey number)
- Improved estuary health (various metrics)
- Habitats improved (number and location of native trees planted, survival rates, length of river riparian fenced 5 m from waterway, length of river riparian planted, length of river edge planted with grasses and sedges, area in native bush)
- predators decrease (number of predators killed, bite marks on cards),
- Iconic species increase/are healthy (identified, mapped, monitored)

2 People connect with and enjoy the values of the Moutere from its headwaters to its sea

- Build a constituency by engaging with local communities to create ownership and contribute resources.
- Create sub-catchment groups of approximately 10-20 landowners each that work together focusing on their area with local leaders who ensure coordination with the wider community and this is used as the mechanism to achieve landscape scale change.
- Share philosophies with local iwi perspectives (eg mahinga kai) to find common ground, a shared language to work together, and common goals.
- Engage with local schools to contribute to practical environmental education, growing and planting trees and future guardianship
- Actively publicise work and achievements to motivate and sustain the efforts
- Encourage low impact access to the inlet and sustainable kai moana harvesting
- Assist landowners develop economic and sustainable businesses that captilise on the ecological health of the waterway.

Indicators of success:

- landowner engagement (number and proportion of total land area engaging, number of sub catchment groups and leaders)
- people enjoy and value the environment (sequential survey results)
- increased community awareness and support (attendance, number of events)
- increased activity in future generations (school activities)

3 Natural ecosystems are sustained into the future

- Seeds from remnant original bush are collected and shared to grow plants for the community.
- Community learns about native seed collection and growing seedlings Moutere ecotype plants.
- Community has access to DOC approved native planting plans
- Community nurseries are setup and assisted by the local community and landowner nurseries are encourage.
- Continue to develop and monitor efforts and achievements and adapt plans to match changing morphology and climate
- Create corridors to link habitats that allow native species to flourish
- Create coastal retreat corridors where necessary
- Provide collective input to local strategy, policy, plans and consenting from a local conservation perspective
- Promote links with researchers to increase knowledge and monitoring of the Moutere ecosystem
- Work with developers, forestry, horticulture and IWI to ensure new developments are sympathetic to ongoing environmental restoration and management by promoting the inclusion of good environmental practises (eg sediment mitigation, wetlands restoration, riparian restoration, stream restoration) as part of development plans.
- Attract funding to support ecological improvement including funding for plants and wetland establishment

Indicators of success:

- Ecology restoration plans include predicted outcomes of climate change modelling with respect to sea level rise and storm events
- Projects will be coordinated and staged based on overall priorities informed by science and matched to the available local resources and priorities (meetings, joint funding applications, research projects).
- Organisations working with and supporting the restoration of the Moutere Inlet and its feed waterways (number).
- Funding (amount).
- Plants planted (amount) and survive (survival)

Supporters

