



SHOREBIRDS TRUST



THE NEW ZEALAND
FAIRY TERN
CHARITABLE TRUST

TARA-ITI



MANGAWHAI HARBOUR
Restoration Society

Northland
REGIONAL COUNCIL



Te Kaunihera ā rohe o Te Taitokerau



KAIPARA
DISTRICT

Kaipara te Oranganui • Two Oceans Two Harbours

Managing our Harbour:

What we do now



- Sustainable Mangawhai Project
- Research Note 4



Department of
Conservation
Te Papa Atawhai

Managing Our Harbour

1. Context

The ongoing integrity of Mangawhai's Harbour, including the distal spit, are critical to preserving our unique environment and habitats as well as our growing community, which has chosen to live in Mangawhai because of the recreation and lifestyle options the harbour offers to us all.

This paper reviews what financial resources are being directed to managing our harbour and spit, and also discusses the barriers that are preventing an integrated management approach to ensure that physical risks are eliminated or at least mitigated.

2. Methodology

Those organisations that are involved in undertaking activities that impact the harbour and spit from a physical or environmental perspective were asked to share information on the money and volunteer labour spent on their activities for each of the last 5 years – the financial years from 2018 to 2022. It was agreed that the amounts spent by each of the organisations would remain confidential.

The organisations were:

- *Department of Conservation* – protect and preserve biodiverse flora and fauna.
- *Northland Regional Council* – managing the effects of using coastal waters, mitigating soil erosion and flood control.
- *Kaipara District Council* – manage infrastructure, stormwater, adjacent recreation areas, urban development, water quality and consenting authority.
- *Fairy Tern Trust* - focus on the endangered fairy tern.
- *Shorebirds Trust* – focus on endangered shore birds.
- *Mangawhai Harbour Restoration Society* – focus on restoring harbour to its historical condition.
- *The Riparian Planting Group* – focus on planting waterways feeding the estuary.

There are other organisations that have a strong connection or interest in the harbour and distal spit. The most notable being Te Uri o Hau, which has mana whenua over our harbour, and have a deep cultural and historic connection to it. Others include recreational groups, such as the boating and fishing club, for whom the harbour is a critical component to their purpose. These organisations have not been included in the financial analysis as they are not directly spending funds on the harbour. However, this does not diminish their importance in ensuring the wellbeing of the harbour.

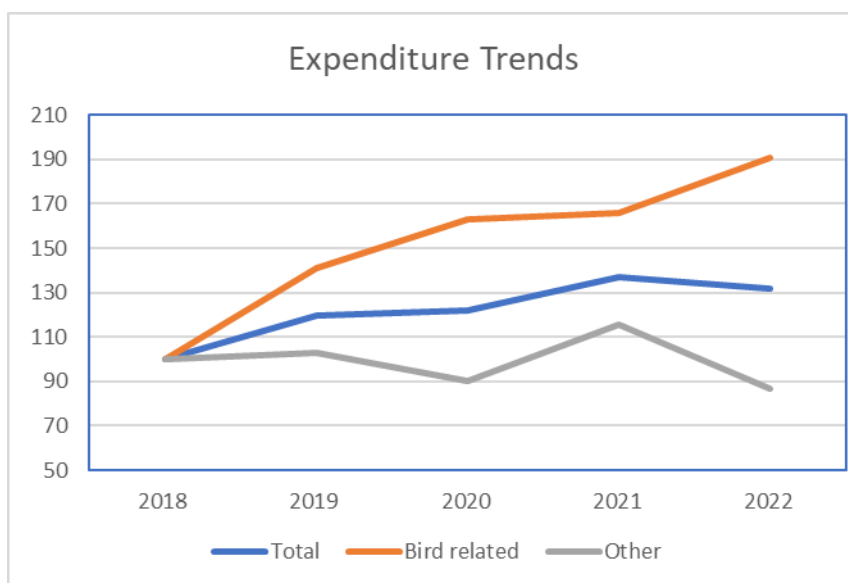
Each organisation was asked for a basic breakdown of their operational expenditure excluding capital expenditure. Collecting this information so that the breakdown was consistent was a challenge and as a result expenditure categories are broad and in some cases an estimate as the organisation doesn't assign costs such as labour in sufficient detail. Accurately measuring and assigning volunteer labour was also problematic. Nevertheless, sufficient data was collected to draw some conclusions.

3. Analysis of the Numbers

In the 5 years to 2022 the organisations above spent a minimum of \$4.2m on their activities, averaging \$842,000 per annum. Growth in expenditure across the 5 years was 32%, rising from \$690,000 to \$909,000 in 2022, peaking in 2021 at \$947,000 and with an average of \$842,000.

2018	690,000	100
2019	825,000	120
2020	840,000	122
2021	947,000	137
2022	909,000	132

Expenditure by organisations focused on endangered birds has almost doubled from \$300,000 to \$572,000 per annum in the last 5 years reflecting the increased efforts to grow population numbers, most notably the fairy tern. On average the expenditure for these organisations was \$456,000. Expenditure by organisations focused on other activities such as the physical protection and condition the harbour and spit has remained essentially static. This includes planting, dredging and water quality measurement. In 2022 expenditure was \$337,000 compared to \$390,000 in 2018. The average has been \$386,000. The following table highlights the expenditure profiles.



At a more granular level, average expenditure by activity is detailed in the table below. Expenditure on bird conservation has averaged \$311,000, or 37% of total expenditure. This is followed by legal/RMA/compliance costs at 18%, a significant proportion of expenditure. Research and planning, along with dredging come in at 15%. Expenditure on planting, primarily on the distal spit, along with mangrove management and water quality testing are small in comparison.

Average Annual Spend by Activity			
Operating/Admin	41,000	5%	Only for focused organisations rather than DOC and the NRC etc
Bird conservation	311,000	37%	As defined by organisations carrying out bird conservation
Research/Planning	126,000	15%	Covers all organisations
Legal/RMA/Compliance	154,000	18%	Covers all organisations
Planting	34,000	4%	Spit and riparian planting
Mangrove Management	31,000	4%	Annual removal of juveniles from cleared areas
Dredging	123,000	15%	Expenditure on dredging operations in the inner harbour
Water quality	22,000	3%	Undertaken by the NRC
Total	842,000	100%	

3. Beyond the Numbers

There are a numerous of organisations with a specific interest in protecting or enhancing aspects of the Mangawhai Harbour and its environs. Most of these organisations have a single purpose, whether it relate to endangered birds (3), planting (2), channel dredging (1), consent and regulatory management (1) and mangrove management (1).

Given the physical threats and challenges around endangered species, such as the fairy tern, the amounts spent on protecting and enhancing the harbour and its environs is very modest. More importantly, there is no integrated plan to bring together the different elements that need to be managed to ensure the best outcomes are achieved in terms of the principles of sustainability. Many of the organisations take the view that their preferred outcome must be mutually exclusive to all others.

In reality, outcomes which include growth in bird numbers, mitigating physical threats from climate change, against a backdrop of a rapidly growing community and increasing recreational use of the harbour cannot be mutually exclusive.

What is missing is an integrated approach to managing the harbour's physical and environmental threats in a holistic sense in order to achieve the best possible outcomes based on informed scientific evidence. The current passive aggressive silo mentality will inevitably lead to all parties being disappointed. Failure to manage the spit from wind erosion and storm damage will inevitably lead to a breach and a negative impact on the birds that depend on it. Failure to manage sedimentation in an environment where tidal flow is compromised will result in the harbour failing. The impact on the community will be devastating – it has happened before; the evidence is there.