## DOC Community Fund | Pūtea Tautiaki Hapori

# Department of Conservation Te Papa Atawhai

## **Application Form**

New Zealand Government

## **Project Summary**

Applicant:	A Rocha (Karioi Project)	
Project title:	Te Whakaoranga O Karioi ('Karioi Project')	
Project summary:	Landscape-scale pest control between Whāingaroa and Aotea harbours, including Mount Karioi and Toreparu Wetland, to protect and enhance threatened ecosystems, restore connectivity from Karioi to Toreparu wetland and protect Threatened (matuku-hūrepo, pekapeka) and At Risk species. Regionally and locally threatened ecosystems and taonga species will also benefit.	
Funding sought for:	Three years	
Funding requested:	\$438,690.00	

## **Project Site**

Please describe the project site:	The project area is between Whaingaroa and Aotea Harbours and includes Karioi, a significant landscape feature (756m), its coastal cliffs (Threatened Naturally Uncommon Ecosystem), estuaries, wetlands (including Toreparu Wetland) and the corridors between these sites. Along the coastline, the sea cliffs have collapsed, leaving massive amphitheatre-like embayments (e.g. Te Toto Gorge) and uninterrupted indigenous forest from coastal to sub-montane. Karioi and the coastal cliffs have cultural, environmental, historical and contemporary significance to iwi and is an important tribal landmark. We have mostly focused on protecting and enhancing wildlife on Karioi along the coastline and coastal cliffs. We have incrementally expanded predator control beyond this area, including Toreparu Wetland. This application will increase predator control to achieve landscape scale, with the main area of work focusing on expansion of intensive predator control to the south of Karioi, including Toreparu, its tributary streams, surrounding forest and farmed landscape. Toreparu Wetland (223 ha) is one of DOC's top 500 Ecosystem Management Units and is an important site within the Waikato Species on the Brink outcome for matuku-hūrepo. This wetland is also a significant site for toi whenua Ngāti Whakamarurangi and Tainui. The project has the support of Ngāti Whakamarurangi and is working with this hapū to achieve its aspirations for the restoration of Toreparu Wetland.
GPS Coordinates	Latitude: -37.842232 Longitude: 174.772505
DOC region:	Hauraki-Waikato-Taranaki
Land type:	Public Conservation Land (DOC administered), Public Land (non-DOC), Private Land (non-DOC), Māori Land
Does the project site have legal protection?	Yes

If so, what legal protection does your site have?

Te Mata Wildlife Management Reserve (Toreparu Wetland)
Mount Karioi (Pirongia Forest Park)
Mount Karioi Conservation Area
Te Toto Gorge Scenic Reserve
Whaanga Recreation Reserve
Bryant memorial Scenic Reserve
Papanui Point Marginal Strip
Ruapuke Scenic Reserve
Waireinga Scenic Reserve
Some private land has QEII Trust Covenant protection.

#### **Project Focus**

Project Focus Threatened Species, Threatened Ecosystems

**Threatened Ecosystems** 

Category	Ecosystem
No details	

**Threatened Species** 

Category	Species
No details	

#### **Project Plan**

What are the current threats on the species and/or ecosystems your project is focused on?

Clearance of vegetation is uncommon in this landscape but unrestricted stock grazing and erosion from agricultural activity contribute to the ongoing degradation of water quality and ecosystem integrity. The main predators of matukuhūrepo (and other indigenous fauna) are ferrets, stoats, weasels and cats. The Project controls these predators on and around Karioi and in an area of Toreparu Wetland but they are uncontrolled through most of the landscape site. Possums are abundant throughout the project site and have led to widespread die-off of preferred trees. They are controlled on 1000 ha of Karioi by the project, intermittently controlled by WRC in a buffer around Karioi, and some localised control by landowners. Rats are a significant predator and the main food of stoats, leading to an increased abundance of this predator. Localised control occurs on 800 ha of Karioi by the project and some localised control by landowners. Rats are a predator of most vertebrates and large invertebrates and compete with indigenous frugivorous birds for fruit. The main weed threat in Toreparu Wetland is willow. Willow reduces the quality of habitat for matukuhūrepo and is a focus for DOCs management. The Karioi Project is assisting DOC by managing other invasive weeds that could take over the wetland once willow is controlled. There are localised mobs of goats and deer. These can have a great impact on indigenous vegetation and the project relies on volunteers to target these.

Project Deliverables		
Deliverable	Date	
Volunteer coordination to recruit and train and manage volunteers	01/07/2029	

Construct 5km of traplines and install traps for feral cats on private land in a buffer around coastal and wetland habitat.	01/11/2027
150ha of tracks cut and bait stations set for multi species predator control.	01/07/2028
Construct 5km of traplines and install traps for feral cats on private land in a buffer around coastal and wetland habitat.	01/11/2026
Complete Cultural Health Index at Toreparu Wetland.	01/11/2028
Install 5km of possum traps between Karioi and Toreparu wetland.	01/11/2026
Rangers and volunteers check traps fortnightly.	01/11/2028
Landowner liaison and partnership work with iwi.	01/07/2029
Install 2km of traps (rat, possum, stoat) at Toreparu Wetland matuku-hūrepo habitat.	01/11/2027
Install 2km of traps (rat, possum, stoat) at Toreparu Wetland matuku-hūrepo habitat.	01/11/2026
Complete Cultural Health Index at Toreparu Wetland.	01/11/2026
Install 5km of possum traps along the southern boundary between Karioi and Toreparu wetland.	01/11/2027

How will these activities help reduce the risk of extinction for the threatened species and/or ecosystems your project is focused on?

Toreparu Wetland (223 ha) has relatively high indigenous dominance and unimpeded fish passage to the sea. The wetland can host a significant population of matuku-hūrepo, with five seen in recent monitoring undertaken by DOC staff. It therefore has high potential as a recovery site for this species. Predator control will increase breeding success and survival of adults (especially breeding females). Control of browsers and weeds will protect and enhance indigenous vegetation in the wetland and in the wider catchment, providing better foraging and nesting habitat that is not possible in most inland wetlands. By leading the work with iwi and landowners, the project can help DOC achieve its objectives for the persistence of this species more costeffectively at this site. Control of browsers and weeds will protect and enhance the indigenous dominance of threatened ecosystems, such as seeps, flushes and estuarine wetlands. Landscape-scale predator control will protect and contribute to the recovery of pekapeka and other wildlife that are present but currently at low density. Partnering with Ngāti Whakamarurangi recognises iwi as kaitiaki and supports them in their objective of restoring Toreparu Wetland. Engaging with local farmers and landowners fosters their commitment to keeping livestock out of forests, wetlands, and coastal areas, while also increasing the amount of private land dedicated to predator control, riparian fencing, and planting initiatives.

What monitoring activities are you planning within the funded period?

Monitoring is an integral part of our work that guides management decisions and measures conservation outcomes. The project will contribute to DOC's Species on the Brink matuku-hūrepo project by undertaking spring call

count monitoring annually at Toreparu Wetland. Pekapeka monitoring, following DOC's spatially balanced design, will be undertaken at least once every second year throughout the project site. The Karioi Project undertakes 5-minute bird counts annually. This survey will increase to include survey sites in Toreparu Wetland and the surrounding managed area. Birdweather Portable Universe Codec (PUC) ID is also used. A baseline measure of stream health will be undertaken in partnership with lwi, using the Cultural Health Index (CHI). Trap catch is monitored constantly using the Trap NZ app. This app is also used to record (toxic) bait application rate and bait take from bait stations. Rat monitoring: Rat Tracking Index (RTI) following the DOC protocol twice a year. Possum monitoring: Wax tag index (WTI) or Residual Trap Catch (RTC) twice a year. Seabird monitoring: Number of fledgling chicks, number of active burrows, species dog survey. Our cat trapping results support DOC's National Science project to quantify the efficacy of feral cat trap types, as part of DOC's Draft Hector's and Māui dolphin Toxoplasmosis Science Plan to better understand cats and the spread of T. gondii and their management (DOC 2021). We partner with DOC and WRC to restore biodiversity on and Is this project part of a larger, ongoing programme? around Karioi. We maintain over 3000 ha of traps and bait stations for rat and possum control on Karioi and adjoining private forest. We have enhanced DOC's possum control and undertaken possum control on behalf of DOC. WRC manages possums in a buffer around Karioi and can maintain funding this only through the efforts of the Karioi Project. Our work supports Ngāti Whakamarurangi's aspirations to restore and rejuvenate the Toreparu repo to bring back matukuhūrepo and restore the ecological connectivity to Karioi. Our predator control programme supports the proposed kākā translocation at Karioi led by Te Iwi Tahi o Karioi with NZ Parrot Trust. Hundreds of community volunteers, including landowners and backyard trappers, are involved with the project in managing predators and species monitoring programmes. As a result, seabirds, wetland and forest birds and bats are returning to breeding status. Booming by numerous matuku-hūrepo in several wetlands throughout the site, 53 ōi chicks have fledged and many kororā. We provide nature-based environmental education for tamariki and rangatahi, fostering the next generation of kaitiaki. This is

### **Biodiversity Benefits**

Expected Project Outcomes	
Outcomes	How will success be measured?
Increase the number of matuku-hūrepo recorded in wetland habitats.	Matuku monitoring annually Sep - Nov.
Increase the number of seabird chicks fledging from the coastal cliffs.	Seabird monitoring annually July - December.

and households.

reflected in the many graduates who have joined the Karioi Project team. We increase the scope of our community partnerships each year. We also partner with Whaingaroa Environment Centre, local schools, businesses, landowners

Increase the number of bat detections across the Karioi landscape.	Bat monitoring in 2025 / 2027.
Increase numbers of other wetland, estuarine and forest birds, fernbird, bellbird, banded rail, tomtit, kereru, spoonbills etc.	5 minute bird counts, acoustic monitoring.
Improved stream and wetland health.	Cultural Health Index (CHI) completed.

Please explain how you intend to sustain the conservation benefits beyond the funded period and how any additional work will be resourced. We have been working with the Whāingaroa Raglan community since 2009 to restore biodiversity at a landscape scale. The community is very supportive of the project and hundreds of volunteers have participated each year to provide over 6 thousand hours of volunteer support for predator control work, advocacy and species monitoring. To make the project more sustainable we use volunteers as much as possible, including days for volunteers to fill bait stations, undertake fortnightly trap checks on over 3000 ha and undertake species monitoring. The Karioi Project maintains a small staff to manage delivery of the Karioi Project, obtain funding, support volunteers and undertake some maintenance and implementation of assets where the work is more difficult, or a greater level of skill/training is required. Our activities enable WRC to continue funding a possum control buffer around Karioi. The Karioi Project delivers predator and weed control and species monitoring on behalf of DOC, using our existing connections to enable this work to be done more cost-effectively. Our environmental education and volunteering programs foster community interest in conservation and build capacity for active participation. Graduates of our Manaaki Ao program are employed by the Karioi Project, growing the next generation of kaitiaki. The Karioi Project actively seeks social enterprise opportunities for long-term funding, with increasing support from local businesses and philanthropists each year.

Describe the wider biodiversity benefits your project will achieve.

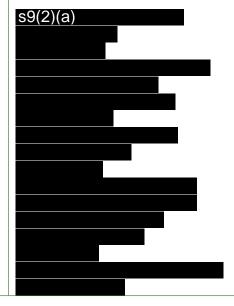
Enhanced species protection: The Project has improved survival of threatened and taonga species. Our staff and volunteers trap predators at several wetlands within the project area, helping increase matuku-hūrepo numbers. Fledging success of ōi and kororā is increasing. Monitoring of other vulnerable species, indigenous forest birds and longtailed bats is underway to measure the impact of predator control. Empowerment of local iwi: Partnering with Ngāti Whakamarurangi empowers the iwi as kaitiaki, contributing to the restoration of the Toreparu Wetland and strengthening local stewardship of natural resources. Our predator control network supports Te Iwi Tahi o Karioi and the NZ Parrot Trust in translocating kākā to Karioi, as large-scale pest control is essential for the success and approval of the project.Community engagement and volunteerism: Over 300 volunteers contribute thousands of hours annually to conservation efforts, while 450+ local households participate in predator control through the Backyard Hub programme. Riparian and coastal habitat restoration: Longterm engagement with local landowners is leading to more riparian fencing and planting that helps restore critical wetland and coastal ecosystems, improving water quality and biodiversity. Youth development as kaitiaki: Nature-based education programmes cultivate the next generation of

kaitiaki, with graduates now employed by the Karioi Project,
ensuring long-term sustainability.

Expected Outputs		
Project Output	Description	Target
Hectares of predator control	Maintain a landscape-scale predator trap network annually. Involves supervision of volunteers supported by Karioi project rangers.   Install trap lines for possums between Karioi and Aotea Harbour, including Toreparu Wetland in first year   Install multispecies predator traps in Toreparu Wetland in first year   Install trap lines for cats	5,000.00
Hours of active monitoring	Spring (October-November) matuku- hūrepo call surveys in wetlands throughout the project site annually. Timed to coincide with DOC-led surveys.   Annual monitoring of nesting success for seabirds, e.g., grey-faced petrel, little penguin.   Undertake annual surveys of long- tailed bats using a spatially balanced survey design	2,400.00
Number of volunteer hours	Checking traplines   Backyard trapping   Trap tunnel working bees   Other activities	32,760.00
Number of community events	Bait deployment days   Volunteer engagement, tunnel building and advocacy days	33.00
Number of other groups actively working with	Hapū / iwi groups	3.00

#### **Permissions**

List the property owner(s) and whether they have agreed to the proposed project being undertaken on their land We keep a Landowner Communications Log for all our toxin bait operations communications. 27 landowners have responded verbally or via email and this is logged in the spreadsheet.



	Landowners have given permission to cross private land to access trap lines where needed, verbally and written. Six landowners we regularly work with have provided signed permissions.
If you are working on Public Conservation Land, do you have an active community/management agreement with DOC that would allow you to undertake this project?	Secured
Do you currently have a Health and Safety Plan to support the safe delivery of the proposed activities?	Yes

Permissions and Permits		
Name of Permission or Permit	Status	
DOC Management Agreement	Secured	
Key private landowner written agreements for access to undertake predator control and seabird monitoring.	In progress	
Wildlife Acts Authority (issued 2017) for handling, banding, monitoring and surveying grey-faced petrels.	Secured	
Banding Certification Level 2 (2019)	Secured	
Controlled Substance Licence to buy toxins	Secured	
Consent to use toxins on land administered by the Department of Conservation approved (2024)	Secured	

## **Engagement**

Is your project Māori led project?	Co-led
How have you engaged with iwi or hapū for this application?	Ngāti Whakamarurangi are actively engaged in guiding restoration priorities at Toreparu Wetland to align with their Motakotako Marae Environment Plan (2008). Activities include developing a Cultural Health Indicator (CHI) monitoring plan (2014), advocating for fencing and replanting alongside WRC and DoC, undertaking research alongside Manaaki Whenua Landcare Research (2023 and 2024), and ongoing community education initiatives. The hapū will have two wānanga to update their CHI plan, undertake CHI monitoring and host RAS annually at the marae as part of their education/community engagement.  The first kākā translocation at Karioi is led by Te Iwi Tahi o Karioi together with NZ Parrot Trust, supported by Karioi Project's predator control programme.

## Capability

Name	Role	Employment type	Expertise/experience	Availability
s9(2)(a)	Project Manager	Paid	MSc (Marine and freshwater biology), ecologist, project management, fundraising, staff management, technical expertise	0.8 FTE
s9(2)(a)	Wetland expert	Volunteer	Manaaki Whenua Kairangahau Māori – MSc Ecology, wetland ecology	As needed
s9(2)(a)	Matauranga lead	Paid	s9(2)(a)	As needed
s9(2)(a)	Ecologist	Paid	Karioi Ranger & Titoki Landcare, MSc bat expert	0.2 FTE
s9(2)(a)	Ecologist	Volunteer	Terrestrial ecologist, Titoki Landcare, MSc	As needed
s9(2)(a)	Volunteer coordinator and ranger	Paid	Many years of volunteer coordination and hunting, trapping experience	0.8 FTE
s9(2)(a)	Senior ranger	Paid	Experienced ranger 5+ years	0.8 FTE
s9(2)(a)	Ecologist and advisor	Volunteer	DOC technical advisor	As needed
s9(2)(a)	Ranger	Paid	Experienced ranger 5+ years	0.5 FTE

How are you collaborating and connecting with others to deliver this project?

Working alongside our community we increase the scope for partnerships each year. We partner with Waikato Regional Council, DOC, Te Whakaoranga O Karioi, Raglan Area School, local and regional schools, tertiary institutes, Whaingaroa Environment Centre and NZ Parrot Trust. Our ongoing pest control supports the kākā reintroduction project led by Te lwi Tahi o Karioi and Toreparu Wetland in partnership with Ngāti Whakamarurangi. We regularly engage with our community via E News, social media, website, local media and radio, social gatherings, community focused events, as a charity partner and much more. A film was produced with Patagonia which can be viewed on our website www.karioiproject.co.nz. Volunteers, experts and science / ecology professionals support our work and provide technical knowledge and educational / training opportunities. Our environmental education programmes grow the next generation of kaitiaki. In alignment with Te Whare Tapa Wha, our nature-based programmes foster a deep connection with our local environment. We partner with schools to deliver over 10,000 hours of education to hundreds of akonga each year. Based on an experiential learning framework we provide tools for practical action, leadership, behaviour change, resilience and an appreciation and understanding of ecology and environment. As a result we have been able to provide intern, work experience and employment opportunities to young people and our community.

Provide a brief description of your governance structure.

Te Whakaoranga O Karioi - The Karioi Project is a community-led conservation and education project, a community partnership with members of Tainui o Tainui hapū and Ngati Whakamarurangi hapū, A Rocha Aotearoa NZ, Whāingaroa Environment Centre, Department of Conservation, Waikato Regional Council and the Whāingaroa/Raglan community. A Rocha Aotearoa manages the projects day to day operations of the Karioi Project. A Rocha is an environmental org with a vision/mission to see ecosystems restored and communities across Aotearoa actively caring for the earth through community-based conservation, developing environmental leaders and taking practical actions. A Rocha employs 15 staff at 7.9 FTE on projects across Aotearoa. Our projects include habitat restoration, species monitoring, community outreach, education and advocacy for nature. A Rocha is governed by an experienced board of trustees comprising seven individuals with experience in finance, project management, community conservation, community engagement and mātauranga Māori. A Rocha's patrons are

serves as our advisor. The Karioi Project has a steering group that includes mana whenua who provides guidance and insight to help the project achieve its outcomes.

Previous Projects	
Description	Funding Amount
Karioi Project expansion and scope over the last 10 years to increase predator control, deliver environmental education and species monitoring programmes.	3140924
Eco Church Aotearoa Project (2020-ongoing): The Eco Church initiative encourages church communities to embrace sustainable action and climate action from a holistic perspective through mentoring support, leadership development programmes, resources and practical action.	285293

## **Project Budget**

Total funding requested	\$438,690.00
Co-funding for project	s9(2)(b)(ii)
Total project cost	

Budget					
Year of Project	Activities	Resources Required	Funding Requested	Other Funding Sources	Estimated Total
Year One Budget	Project managementProject management, landowner and iwi liaison	Project Manager ( s9(2)(b)(ii)	s9(2)(b)(ii)	s9(2)(b)(ii)	
Year One Budget	Seabird / wetland monitoring	Seabird / Wetland Ranger (\$9(2)(b)(ii)	_		
Year Two Budget	Project management, landowner and iwi liaison	Project Manager s9(2)(b)(ii)	-		
Year Three Budget	Project management, landowner and iwi liaison	Project Manager ( \$9(2)(b)(ii)	-		
Year One Budget	Recruit, train and manage volunteers	Volunteer Coordinator ( s9(2)(b)(ii)	-		
Year One Budget	CHI monitoring	Mātauranga consultant ( s9(2)(b)(ii)	-		
Year One Budget	Install traplines and traps	Biodiversity ranger ( s9(2)(b)(ii)	-		
Year One Budget	Track cutting, establishment and maintenance	Ranger (S9(2)(b)(ii)	-		
Year One Budget	Mileage and maintenance of vehicles	Fuel, maintenance	\$5,000.00		
Year One Budget	Install traplines and traps	DOC 200/250 mustelid traps x 100 @ \$120 ea	\$12,000.00		
Year One Budget	Install traplines and traps	Possum traps 100 @ \$65 ea	\$6,500.00		
Year One Budget	Install traplines and traps	Cat traps 20 @ \$60	\$1,200.00		
Year One Budget	Ensuring Health and Safety of the entire project	H&S training, licences, personal safety gea	\$5,000.00		

Year Two Budget	Seabird / wetland monitoring	Seabird / Wetland Ranger (S9(2)(b)(ii)	s9(2)(b)(ii)
Year Two Budget	Recruit, train and manage volunteers	Volunteer Coordinator ( s9(2)(b)(ii)	
Year Two Budget	CHI monitoring	Mātauranga consultant (s9(2)(b)(ii)	
Year Two Budget	Install traplines and traps	Blodiversity ranger ( \$9(2)(b)(ii)	
Year Two Budget	Track cutting, establishment and maintenance	Ranger (s9(2)(b)(ii)	
Year Two Budget	Mileage and maintenance of vehicles	Fuel, maintenance	\$5,000.00
Year Two Budget	Install traplines and traps	DOC 200/250 mustelid traps x 50 @ \$120 ea	\$6,000.00
Year Two Budget	Ensuring Health and Safety of the entire project	H&S training, licences, personal safety gear	\$5,000.00
Year Three Budget	Seabird / wetland monitoring	Seabird / Wetland Ranger (\$9(2)(b)(ii)	
Year Three Budget	Recruit, train and manage volunteers	Volunteer Coordinator ( s9(2)(b)(ii)	
Year Three Budget	CHI monitoring	Mātauranga consultant ( s9(2)(b)(ii)	
Year Three Budget	Install traplines and traps	Biodiversity ranger ( s9(2)(b)(ii)	
Year Three Budget	Track cutting, establishment and maintenance	Ranger (s9(2)(b)(ii)	
Year Three Budget	Mileage and maintenance of vehicles	Fuel, maintenance	\$5,000.00
Year Three Budget	Install traplines and traps	DOC 200/250 mustelid traps x 50 @ \$120 ea	\$6,000.00
Year Three Budget	Ensuring Health and Safety of the entire project	H&S training, licences, personal safety gear	\$5,000.00
Project costs			\$438,690.00

Volunteer and in-kind contributions						
Co-Funder /	Value of Co-funding	Value of in-kind	Total Co-funding	Status		
In-Kind Details		funding				
CVC Community & Volunteering Fund 2024	s9(2)(b)(ii)	\$0.00	s9(2)(b)(ii)	Confirmed		
Davenport Grant		\$0.00		Confirmed		
DOC Waikato Grant Toreparu 7369198		\$0.00		Confirmed		

DOC Waikato Bittern	s9(2)(b)(ii)	\$0.00	s9(2)(b)(ii)	Confirmed
NAR Foundation		\$0.00		Confirmed
WWW Fund		\$0.00		Confirmed
Lotteries Environment and Heritage Fund 2023		\$0.00		Confirmed
Pacific Development and Conservation Trust 2024		\$0.00		Confirmed
REN Fund		\$0.00		Confirmed
Waikato District Council Discretionary Grant		\$0.00		Confirmed
Davenport Fund (s9(2)(b)(ii) 2025-2028		\$0.00		Confirmed
Volunteers to check traps, fill bait stations and monitor seabird burrow sites. Year 1: 6000 hours @ \$23.15/hour = \$138,900   Year 2: 7000 hours @ \$23.15 = \$162,050   Year 3: 8000 hours @ \$23.15 = \$185,200	\$0.00	\$486,150.00	\$486,150.00	Pending
Backyard Hub households: 460 households @ 12 hours per household per year @\$23.15/hour = \$127,788 per year   x 3 years = \$383,364	\$0.00	\$383,364.00	\$383,364.00	Pending
DOC Waikato - Bait, traps and labour for bait operations - 3 years \$9(2)(b)(ii)	\$0.00	s9(2)(b)(ii)		Pending