

**MISSION:** To reverse the decline of New Zealand Biological Heritage, through a national partnership to deliver a step change in research innovation, globally leading technologies and community and sector action. Our vision for success is that the mauri of kauri and our native myrtle species is safeguarded, sustained and enhanced for our tamariki and mokopuna.

IMPACTS	New Zealanders value our biological heritage, understand how it is changing, and are inspired to take action to protect it <i>Whakamana – Empower</i>		New Zealand’s biosecurity system is world class <i>Tiaki – Protect</i>			New Zealand’s natural and production ecosystems are resilient and thriving <i>Whakahou – Restore</i>	
	THEMES	Oranga <i>(Te Mauri o Te Rākau)</i>	Mobilising for Action	Risk Assessment & Ecosystem Impact	Integrated Surveillance <i>(Mātauranga Māori Framework for Surveillance (MMFS))</i>	Control, Protect, Cure <i>(Tools for Detection and Management)</i>	Host, Pathogen & Environment
2024 GOALS	Affected Māori communities empowered to protect & restore their ngahere	Key stakeholders & communities confident of their ability to deliver impact	Risk assessment framework used in conservation & management decisions	MMFS guiding biosecurity management & research practices	At least two tools for detection &/or protection validated	Epidemiological data & models guiding NRT Themes	Tikanga based approaches to seed/germplasm protection implemented at 90% sites
	Māori leading positive system change in forest biosecurity	Human dimensions of forest well-being underpin kaitiakitanga & management of ngahere	Risk analysis & indicators used to prioritise vulnerable ecosystems	Data protocols, principles & tools agreed and adopted	Methods for early detection & ID of incursion of new MR strains in place (by 2024)	Kaitiaki & agencies using MR predictive tools & information resources (by 2022)	DOC’s mana whenua engagement strategy guided by co-designed best practice protocols
	Te Ao Māori worldview intrinsic in ngahere restoration in Aotearoa	New communication tools empower community engagement	Key ecosystem impacts of KDB & MR quantified & included in risk assessment	High value tangata Māori engagement demonstrated by ‘Huarahi Tika’ framework	Efficacy of disinfection method(s) evaluated & DOC protocols validated	MR genomics guiding future novel plant protection strategies	Mana whenua-led restoration initiatives for kauri & pōhutukawa initiated
		Best practice learnings shared for application in future community-led projects	Methodologies to assess priority social, cultural economic and ecological indicators	Disease distribution, severity & probability of absence information freely available	Tool prototypes for KDB and MR in field testing	KDB pathogen genomics & origin guides development of novel control strategies	Kaupapa Ngāti Kuri approach preserving endangered taonga
Critical Steps – the pathway to impact	2023/2024 Rongoā tools developed, tested & learnings shared as appropriate ④ <i>Completed</i>	Values (below) embedded in strategic planning & programmes ⑥ <i>In progress</i>	Framework for measuring ecosystem health and resilience developed and tested ⑦ <i>In progress</i>	MMFS co-developed & tested using map-based surveillance tool ③ <i>In progress</i>	Tool prototypes for KDB & MR (by 2024) in testing by kaitiaki and investment team ④⑤ <i>In progress</i>	Field sites established to measure pathogen spatial variability in distribution & spread across forest landscapes <i>In progress</i>	Mātauranga Māori led restoration research options identified, co-developed and implemented ②⑥⑦ <i>Completed</i>
	2022/2023 Rongoā KDB solutions and kupu Māori (mimicking forest sounds) developed & tested ④ <i>In progress</i>	Values (below) applied to proactively engage users developing practices that enhance forest well-being ⑥ <i>Completed</i>	Ecosystem impact indicators identified & gaps in baseline data addressed ⑦ <i>In progress</i>	MMFS data gaps & application improvements identified & communicated ③ <i>In progress</i>	Potential tools “socialised” & responses monitored to build confidence for tool adoption & knowledge application ④⑤ <i>In progress</i>	Simulation model of MR myrtle rust constructed; predictive tools developed ③ <i>Completed</i>	Quantitative agent-based models developed to identify where in landscape to protect & restore to maximise chances of taonga surviving in future ngahere ② <i>In progress</i>
	2021/2022 Best practice culturally acceptable methodology for seed/germplasm collection & protection agreed & shared ①⑥⑦ <i>In progress</i>	Understand shared & relational values related to te Taiao, ngahere & taonga species ⑥ <i>Completed</i>	Develop social, cultural and economic values & impact indicators, including those that are Māori-specific ⑦ <i>In progress</i>	Biodiversity Management Areas spatially defined & Tangata kokiri identified across NRT themes ③ <i>Completed</i>	Mātauranga Māori-based tools & bioactives investigated in partnership (link to Oranga) ④⑤ <i>In progress</i>	High quality <i>Phytophthora agathidicida</i> genome assembled and differential expression of key genes investigated ⑤ <i>Completed</i>	Culturally appropriate protocols for seed/germplasm protection co-developed with mana whenua & DOC ① <i>In progress</i>
	2021/2022 Monitoring & evaluation framework established to drive synergy & impact across Te Mauri projects <i>Completed</i>			Principles & prototypes of data & modelling tools developed ③ <i>Completed</i>	High risk seed & scope projects completed & novel tool selected for further development ④⑤ <i>Completed</i>	Appropriate cultural authority arrangements established; ngahere matai developed & in use ① <i>Completed</i>	Mana whenua support for genetic marker research for conservation of taonga determined ⑦ <i>Completed</i>

Supporting Architecture (Pou)