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 — Whakamana – Empower	New Zealand's biosecurity system is world class — Tiaki – Protect	New Zealand's natural and production ecosystems are resilient and thriving — Whakahou – Restore

THEMES

Oranga (Te Mauri o Te Rākau)	Mobilising for Action	Risk Assessment & Ecosystem Impact	Integrated Surveillance (Mātauranga Māori Framework for Surveillance (MMFS))	Control, Protect, Cure (Tools for Detection and Management)	Host, Pathogen & Environment	Conservation & Restoration

2023 GOALS

Oranga	Mobilising for Action	Risk Assessment & Ecosystem Impact	Integrated Surveillance	Control, Protect, Cure	Host, Pathogen & Environment	Conservation & Restoration
Affected Maori 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 2022)	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 field tested	KDB pathogen genomics & origin guides development of novel control strategies	Kaupapa Ngāti Kuri approach preserving endangered taonga

Critical Steps – the pathway to impact

2023

Oranga	Mobilising for Action	Risk Assessment & Ecosystem Impact	Integrated Surveillance	Control, Protect, Cure	Host, Pathogen & Environment	Conservation & Restoration
Rongoā tools developed, tested & learnings shared as appropriate ④	Values (below) embedded in strategic planning & programmes ⑥	Framework for measuring ecosystem health & resilience developed & tested ⑦	MMFS co-developed & tested using map-based surveillance tool ③	Tool prototypes for KDB (by 2023) & MR (by 2022) tested by kaitiaki and investment team ④⑤	Field sites established to measure pathogen spatial variability in distribution & spread across forest landscapes	Mātauranga Māori led restoration research options identified, co-developed and implemented ②⑥⑦

2022

Rongoā KDB solutions and kupu Māori (mimicking forest sounds) developed & tested ④	Values (below) applied to proactively engage users developing practices that enhance forest well-being ⑥	Ecosystem impact indicators identified & gaps in baseline data addressed ⑦	MMFS data gaps & application improvements identified & communicated ③	Potential tools "socialised" & responses monitored to build confidence for tool adoption & knowledge application ④⑤	Simulation model of MR myrtle rust constructed; predictive tools developed (by 2022) ③	Quantitative agent-based models developed to identify where in landscape to protect & restore to maximise chances of taonga surviving in future ngahere ②

2021\2022

Best practice culturally acceptable methodology for seed/germplasm collection & protection agreed & shared (by 2021) ①⑥⑦ *In progress*	Understand shared & relational values related to te Taiao, ngahere & taonga species ⑥ *Completed*	Kaupapa Māori process used to develop indicators for Maori-specific social, cultural, & economic impacts (by 2022) ⑦	Biodiversity Management Areas spatially defined & Tangata kokiri identified across NRT themes ③	Mātauranga Māori-based tools & bioactives investigated in partnership (link to Oranga) ④⑤	High quality *Phytophthora agathidicida* genome assembled and differential expression of key genes investigated (2021/22) ⑤	Culturally appropriate protocols for seed/ germplasm protection co-developed with mana whenua & DOC ①

2021

Monitoring & evaluation framework established to drive synergy & impact across Te Mauri projects *Completed*		Broadly agreed set of values & indicators established & prioritised ⑦ *Completing in 2022*	Principles & prototypes of data & modelling tools developed ③ *Completed*	High risk seed & scope projects completed & novel tool selected for further development ④⑤ *Projects completed*	Appropriate cultural authority arrangements established; ngāhere matai developed & in use ① *Close to completion*	Mana whenua support for genetic marker research for conservation of taonga determined ⑦ *Completing in 2022*

Supporting Architecture (Pou)