ORANGA PROGRAM – CRITICAL FRIEND

MEASUREMENT FRAMEWORK 2022

With Support From:





NEW ZEALAND'S BIOLOGICAL HERITAGE Ngã Koiora Tuku Iho

Authored By:

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What is the Oranga Program?

Oranga (noun): survivor, food, livelihood, welfare, health, living.

Example: Nā, i mua ake rā he oranga nui e puta ana mai ki te tangata i te kiri rāpeti (TP 1/12/1900:5). Now, there used to be a good living for a person from rabbit skins.

This definition of the kupu Māori 'oranga' is from Te Aka, the Māori online dictionary, and it is interesting for two reasons. First, for the obvious importance of oranga in the continued survival and renaissance of Māori. Indeed, those kupu Pākehā definitions show that without oranga as food, livelihood, welfare, health and living, Māori would no longer exist as a People, we would not be survivors.

The second point of interest is the example of oranga in a sentence, which refers to the hunting of rabbits – an introduced species that continue to negatively impact landscapes in Aotearoa – that was a stand-by job for many people.

These two concepts come together in this program of Māori research, namely Māori wellbeing and the management of ecosystems which are at the heart of our economic and cultural survival as a People. The whakataukī or saying that we use to introduce this project summarises the enormity of this concept: "Mauri Ora, te mauri o te ngahere, te mauri o te rākau, te mauri o te tangata". The life force of the forests, of the trees, and of the people are all intimately connected.

To implement this program, we have relied on the wisdom and support of our Kahui, and the dedication of our support staff. In this first report of the Oranga programme, we are proud to present the progress and achievements of Maori leaders, researchers, their allies, and the communities that are to the forefront of protecting the biological heritage of Aotearoa New Zealand. The Oranga program is comprised of five research areas:

- RA1 Te whakaora o ngā kauri: Rongoā solutions for kauri dieback
- RA2 Te reo o te waonui a Tāne: The language of the domain of Tāne
- RA3 Hapū Solutions for Myrtle Rust
- RA4 Te Mana Motuhake a Ngā Kākano: The Sovereignty of Seeds
- RA5 Critical Friend





This report is an output of the last RA, the "Critical Friend" component, whose role is to support the other four research areas and their teams towards to the satisfactory completion of their tasks, and the fulfilment of the aspirations of the Oranga programme. We have sought input and engagement from each of the teams to define and refine measures of progress and impact. And the realisation of "impact" is what Māori communities (and funders) expect and deserve.

What are the Intentions of the Framework?

Given the importance of Oranga to Māori (and non-Māori) wellbeing, we argue the impacts from this programme have wider importance than just the immediate aims of each project. The biggest impact the Oranga programme is committed to is showing how Aotearoa New Zealand's science and innovation 'eco-system' is changing to be more inclusive of, and responsive to, Māori. We see the inclusion of Kaupapa Māori principles as key to transforming private and public services across Aotearoa to build new institutional arrangements and systems for effective biosecurity strategies and tactics.

In addition, and contributing to this primary impact, the programme is actively dispelling myths such as are held about Kauri Dieback & Myrtle Rust investment and research with Māori and highlighting Mātauranga Māori-led Innovation in the biosecurity space.

We knew we needed a way to create awareness within the teams and across the project about how we were progressing towards the goals of funders and communities. While this can be a tricky balancing act, we believe our collective approach and the values that underpin our work will enable us to realise the program goals. This framework describes and analyses how we have undertaken our work. By regularly reflecting on what we have done, how we have done it, and – importantly – why we have done it, we have been able to maintain the focus and momentum that vital research such as this is built on.

Mauri ora!

Our Chosen Approach

Scope of this Framework

The purpose of this framework is to help us measure progress at the Oranga Program level. This means that the contents of this report, although heavily informed by each project's intentions and goals, describes our approach to measuring our collective progress. It is our intention that the projects can see themselves within this broader framework and can use it as a guide to help create their own determinants of success to ensure the unique elements and strengths of each project are not lost (e.g., outcomes, indicators).

Kaupapa Māori - Our Guiding Principles

As the reader will notice throughout this document, the projects and this measurement framework are led by the Principles of Kaupapa Māori (Graham Smith, 1997; Linda Smith; 1997; Leonie Pihima, 2011; Taina Pohatu; 2005). To us, Kaupapa Māori isn't a specific research methodology to follow when doing research and evaluation with Māori iwi and hapū but a way of doing good research that embodies the way in which Māori Peoples think, act, and live. There are eight guiding principles that guide the research and evaluation process, including:

Tino Rangatiratanga - The Principle of Self-determination • Māori independence, sovereignty, iwi autonomy, and self-determination in research & evaluation (Smith, 1997) Taonga Tuku Iho - The Principle of Cultural Aspiration • Māori ways of knowing, doing, and acting are valid, privileged, and at the forefront of analysis in research and evaluation (Smith, 1997) Ako Māori - The Principle of Culturally Preferred Pedagogy • Those teaching, learning, and transferring knowledge are interconnected and that relationship is reciprocal and done through the lens of Māori pedagogy (Smith, 1997) Kia piki ake i ngā raruraru o te kainga - The Principle of Socio-Economic **Mediation** The ongoing and persistent effects of colonisation is mediated by Māori cultural understandings and practices (Smith, 1997) Whānau - The Principle of Extended Family Structure (Smith, 1997) • Relationships, and the responsibilities that go along with a relationship, are key and influence every part of a given research or evaluation project. Researchers and evaluators must foster and grow relationships not only between individuals, but also with the research topic itself (Smith, 1997) Kaupapa - The Principle of Collective Philosophy • Perhaps encompassing all other principles, Kaupapa refers to the driving force that guides all parts of iwi and hapū aspirations. Therefore, the research and evaluation must contribute to those aspirations and demonstrate whakaaweawe (impact) as a responsibility to utu (reciprocate; Smith, 1997) Te Tiriti o Waitangi - The Principle of the Treaty of Waitangi • Affirming Māori sovereignty and rights (including research rights) through the research and evaluation (Pihama, 2001) Ata - The Principle of Growing Respectful Relationships (Pohatu, 2005) • Building and nurturing relationships as a way of understanding wellbeing

Each of these principles influences the way in which the Organa Program is delivered and how the projects, including Critical Friend, carry out the research. As mentioned, these principles are inherent, natural, and intentionally guide our decision making. These Kaupapa Māori principles are put into action just as they are in everyday life – through our collective values guiding our thinking and actions.

A Values-based Way of Measuring

In our experience, we have found using a values-based approach can help clarify and lead program development as well as provide a critical lens for interpreting results and feedback. In particular, a values-based approach to evaluation is done by obtaining consensus on a **set of core values** that inform not only **how** we measure, but also **why** and **what** we measure. We have formed these values from conversations with each of the projects within the program, meaning they have been used to guide the choices and philosophies of the research. We also saw that identifying common values can help facilitate discussions on the outright and hidden intentions for a given program, but also help determine how and why a certain activity needs to take place. It also lends to the creation of short, intermediate, and long-term outcomes, outputs and indicators (described later in this document). Through this process, we found it works especially well for values to be:

- Relevant for everyone involved
- Inspiring to those working with and for the program
- Flexible and developmental in nature
- Measurable

To facilitate this process, we created a number of a theory of change **visualizations t**hat demonstrates the interconnectedness of these values. They helped us to have discussions about the program but also root and frame evaluation in what is most meaningful to everyone at the table.

The Guiding Values of the Framework

Through collective and independent project conversations, we were able to establish **11 core values** that the projects can see themselves in through their work. The reader will notice that these are well informed by the Kaupapa Māori principles outlined earlier and represent our way of operationalizing them. Specifically, these values helped to provide a common direction for the design, implementation, and delivery of the projects at the Oranga Program level (including the Critical Friend element of the program). The values we chose are:



Knowledge (of people, place, and Lore; of the Lore of the forest and Kauri; kaitiakitanga; of the ecosystem)



Recognition (of Kauri Ora; expression of Lore; of how Māori knowledge informs the solution)



Relations (engage and co-exist with Kauri Ora, partnerships, working together, creating and maintaining relationships)

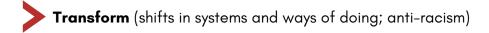


Responsiveness (to the needs of the community)



Mentorship (capacity building, training, passing knowledge)

Renew (valuing Māori processes and knowledge)



Sustainability and Preservation (of knowledge, including conservation)

> s

Sovereignty (of knowledge and processes)



Equity and Respect (honouring and following protocols, responsibility, anti-racism, kaitiakitanga)

Separately, these values provide direction for which the Oranga program could head. However, when these values are put together and presented as a functioning system their strengths are amplified and we have used that to facilitate meaningful conversations about the design and delivery of the projects. This is because having a set of values that we all agreed on provides us with a common language to speak about the program, despite having different projects. Together, we anticipate the following aspirations:

- By 2024 The Māori environmental worldview is an intrinsic part of restoring the ngahere from kauri dieback and myrtle rust.
- By 2024 Māori are leading positive system change in forest biosecurity leading to increased resilience to tree pests and diseases, especially as related to kauri dieback and myrtle rust.
- By 2024 Affected Māori communities are empowered to protect and restore their ngahere from kauri dieback and myrtle rust.
- By 2075 Our mokopuna are accessing and engaging with the ngahere for cultural, physical and spiritual outcomes unencumbered by myrtle rust and kauri dieback

To help demonstrate how these goals are understood through our values, we chose to talk about them using a metaphor of the Kauri and tohorā (whale) to show the flow and cohesiveness of these values. A description of this metaphor is below, but we strongly encourage you to view a short video we made that presents a step-by-step explanation by one of our team members. **Click here to view that video**.

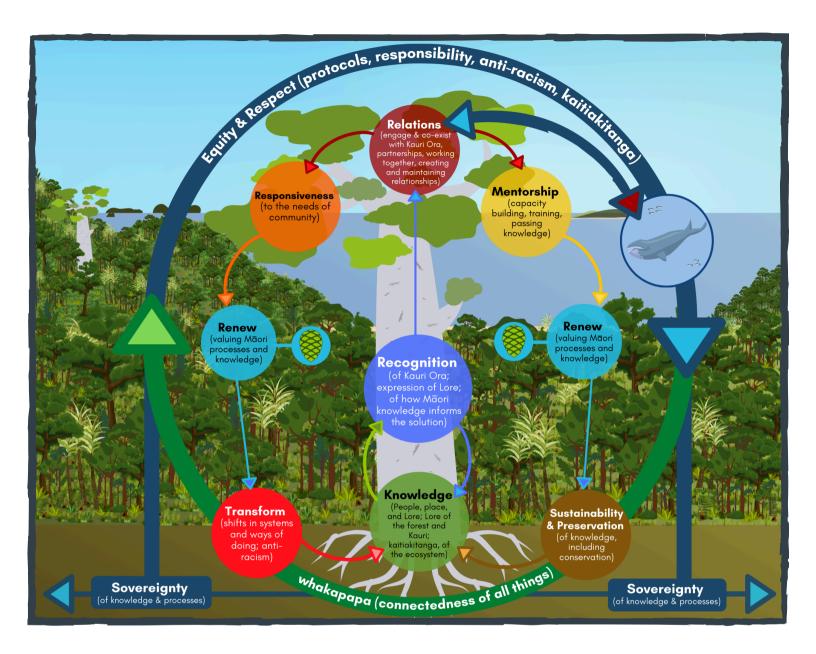
We invite the reader to start with the Kauri Tree diagram (click here to download it separately and have it open as you read), specifically at the bottom of it near the roots. This is where the first value is presented – **knowledge**. This value represents knowledge of people, place, and Lore (multi-faceted, including the Lore of the forest and of the Kauri), knowledge of the kaitiakitanga of Kauri, and of the broader ecosystem. This value represents the roots of the Kauri because these concepts help provide strength and nourishment for the tree itself. Knowledge is something you can't always physically see, which is also why it is placed near the base or roots of the Kauri in this diagram. Moving upwards on the trunk is the next value, **recognition**. This value includes recognition or awareness among projects and anyone they would be interacted with of the Kauri Ora, of how the Lore of the Kauri is expressed

and understood, and of how Māori knowledge is the best way to ensure that the Kauri thrive. Knowledge and recognition are linked with double arrows, implying a never-ending cycle of knowledge informing recognition and of recognition informing additional knowledge.

Moving further up the Kauri towards the top of the tree is the third value termed relations. This is referring to the importance of engaging and co-existing with the Kauri Ora (for projects and those they would be impacting), of partnerships, working together, and the overall creation and maintenance of relationships. As is implied by the diagram, this is facilitated by knowledge and recognition. From there, there are two additional values spreading out to form the canopy of the Kauri. These are responsiveness and mentorship. In short, these refer to the need of the projects and kaitiakitanga of the Kauri to be responsive to Māori communities while also providing increases in capacity, training (conversation, research, etc.), and the passage of Māori knowledge between generations. Once again, these are informed by the relations value, meaning that as relations progress so can the project's ability to be responsive and provide mentorship. This is further compounded by knowledge and recognition, which helps feed these values.

The Kauri tree also drops large cones to the ground and we believe this can represent another key part of this value system – **renew**. Just as the cones help to create more Kauri, valuing, re-valuing and focusing on Māori knowledge and processes helps to protect the Kauri. As these cones drop to the ground, the cycle continues in the values of **transform** and **sustainability & preservation**. Transform is referring to shifts in colonial systems, in ways of conserving Kauri in Aotearoa. Elements of antiracism and anti-oppression would help the transformation of systems referred to in these projects. On the other side of the diagram is the value of sustainability and preservation, which refers to the continuation of Māori knowledge to help the Kauri thrive (through the engagement with Kauri Ora). Both values are also represented as nutrients that feed the soil and, consequently, the Kauri feed right back into the knowledge value. This starts the cycle over again, which is not intended to have an endpoint.

The projects, much like the Kauri pictured in this diagram, have a full ecosystem around them that regularly affects their growth. This is represented by the larger circle around the outside of the Kauri and contains the values of **equity and respect**. More specifically, an environment of following protocols of Māori knowledge and Kauri protection, adhering to community and Treaty responsibilities, anti-racism, and the promotion of kaitiakitanga creates a healthy environment for the Oranga Program that helps it to thrive. This circle also extends to the bottom of the diagram which attempts to represent the sovereignty of Māori knowledge and processes around the Kauri. These are intentionally placed to link with transform and sustainability & preservation through **whakapapa** (the connectedness of all things). Whakapapa is also present in this diagram not only to show the interconnectedness of this value system, but also to demonstrate the relationship the Kauri has with the tohorā (also demonstrated through the use of a direct arrow from relations to the tohorā). Furthermore, the tohorā is placed on the blue portion of the larger outside circle because the Lore indicates that the natural relationship between the tohorā and Kauri is one of respect and responsibility.

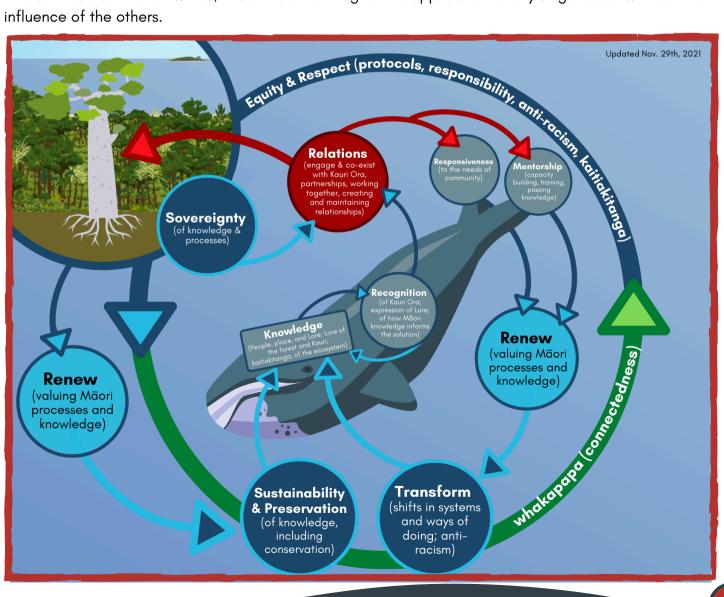


This takes us to the second diagram which is meant to be a sister or companion visualization of the Kauri diagram. **This one features the same value system but is portrayed using the tohorā as the metaphor.** The goal here was to show the strong relationship between the Kauri and tohorā (as is being demonstrated through projects) and to provide another means of understanding this measurement framework.

To begin, we invite the reader to draw their attention to the head of the tohorā, where the **knowledge** value is represented (of people, place, the Lore, and kaitiakitanga). Paired with the tohorā's knowledge system is the heart of the tohorā which contains the **recognition** value in a never-ending cycle that presents the whole-ness of the tohorā (of Kauri Ora, of the Lore, of how Māori knowledge is the best to inform solutions). These two values are intimately connected and help lead to how **relations** can be facilitated (partnerships, relations with the Kauri Ora, creating and maintaining relationships) and, metaphorically, how the tohorā interacts with the environment around it. This

relationship then extends back to the connection with the Kauri, which is represented in the top lefthand part of this diagram. Through the value of **sovereignty** (pictured as a separate circle underneath the Kauri), the relationship between the tohorā and Kauri can be one of co-existence and portrayed through **equity and respect** (portrayed in the overlap of the large blue circle around the tohorā and through the Kauri).

However, the relations value also helps to drive forward **responsiveness** and **mentorship**, which are placed at the tail of the tohorā. Just as the tail of the tohorā helps it propel forward, so does responsiveness and mentorship in the projects (especially when relations are focused on). To the left-and right-hand side of the tohorā is the value of **renew**, which both shows how responsiveness and mentorship can help drive the renewal of Māori processes and knowledge as well as the increased health of the Kauri (through the relationship with the tohorā). Once again, the renew value leads to both **transform** and **sustainability and perseveration** which both work together to ensure the values cycle doesn't stop by informing knowledge at the head of the tohorā. To us, whakapapa is a perfect representation of how all these concepts, including the relationship between the Kauri and tohorā, are interconnected. In other words, it is difficult to imagine the application of any single value without the influence of the others.



What do we Hope to Achieve (Outcomes)?

Using this value system as the primary lens for interpretation, we have come up with several programwide outcomes that are relevant and applicable to each of the five projects. These are written broadly enough to ensure the projects can see their work within them, but specific enough to track overall change. They are broken up into short (attitude changes, capacity/knowledge increases), intermediate (behavioural changes), and long-term categories (overall impact):

Short-term Outcomes

- Increased understanding of a healthy environment (conceptual impact)
 - Understanding of species present, people, relation, synergy, ecosystems, Lore, Kauri Ora
 - Linked Values: Knowledge; Recognition
- Increased connections with and between iwi (capacity building & connectedness impact)
 - Including partnerships, relationships (including with projects/researchers)
 - Linked Values: Relations, Mentorship
- Increased overall iwi and capacity in research, community kaitiakitanga (demonstrated through connections, relationships, and administration from the projects; capacity building impact)
 - Linked Values: Mentorship, Sustainability & Preservation
- Enhanced focus on and acceptance of the Māori worldview (conceptual & cultural change impact)
 - Related to the environment, thinking, ensuring things aren't always black and white
 - Linked Values: Recognition, Transform, Sustainability & Preservation, Equity and Respect; Renew; Sovereignty)

Intermediate-term Outcomes

- Revision of harmful policies to Kauri and those responsible for protecting them (instrumental & conceptual impact)
 - Includes protecting Kauri and Kauri Ora;
 - Linked Values: Renew, Transform, Sovereignty, Equity/Respect, Recognition)
- Promotion (lifting up) of kaumatua, tohunga, and Māori research (capacity building & connectedness impact)
 - Includes actively providing a platform, enabling of work;
 - Linked Values: Knowledge, Relations, Mentorship, Renew)
- Increased appropriate knowledge translation (conceptual and cultural change impact)
 - The flow of information to and from communities (including protocols of what is and isn't shared
 - Linked Values: Renew, Transform, Sustainability & Preservation, Relations)

Long-term Outcomes (Impact of Oranga)

- Increased ability to protect and nourish the Kauri and Kauri Ora (instrumental and conceptual impact)
 - Linked Values: Sustainability & Preservation, Renew, Transform, Sovereignty, Equity & Respect

What are the Outputs and Indicators we Identified?

To help provide a further specification of what we mean by each of our stated outcomes, we developed a set of outputs and indicators that shows not only how we are understanding each outcome but also how we intend to measure progress for each one. For the reader's benefit, we are defining output and indicator as:

- Output
 - A measure that shows the activity of a program (i.e., a receipt of service delivery). Outputs show how and where a program is active and is doing things but doesn't necessarily indicate any change because of activities.
 - Example: # of training activities completed on Kauri kaitiakitanga
- Indicator
 - A measure that is intended to show changes that a program or activity brings (in people, communities, policies, etc.). Different from outputs because it is directly measuring program outcomes rather than tracking the activity of a program
 - Example: % of and stories (examples) from participants reporting an increased understanding of a healthy environment

The full list of outputs and indicators categorized by outcome can be found in Appendix A. However, below is an example of how we are measuring one short-term outcome. Note that selfreport is how we are referring to qualitative evidence (stories):

Increased overall iwi and research capacity in research, community kaitiakitanga (demonstrated through connections, relationships, and administration from the projects; capacity building impact)

• Outputs:

- # of training sessions offered by projects to iwi and/or organizations (e.g., field training on seed storage, taking care of Kauri, etc.)
- # of community visits and/or meetings (in-person or virtually) with the purpose of enhancing capacity or kaitiakitanga infrastructure
- Amount (\$) allocated annually to increasing the capacity of iwi, organizations, and/or projects for the kaitiakitanga of the Kauri
- # of partnerships or agreements (e.g., MOUs) focused on increasing the capacity of iwi and/or organizations

• Indicators:

- # of individuals from iwi contributing to projects (per project; includes advisory committees, research, facilitation of training, etc.).
- # of and self-report from iwi and projects about increases or revitalizations of capacity for kaitiakitanga of the forest
- # of and self-report from iwi and projects about the confidence they have to fulfil their obligation to take care of the Kauri
- # of and self-report from iwi on increases in capacity for Māori/community led research (e.g., how-to, avenues to take, access to resources)

Methods of Collecting Data

In line with Kaupapa Māori, we will design and implement specific data collection methodologies with each of the projects and the individuals they work with. Our goal is to create flexible and meaningful tools that not only measure the outcomes, outputs, and indicators we have identified but foster an environment of learning so we can reciprocate to the projects (and the iwi and hapū they work with).

To this end, specific methodologies will be named at a later date. However, we anticipate privileging stories, conversations, and relationships in our methodologies (i.e., qualitative data) while using numbers (quantitative data) to report back on outputs. We also anticipate using numbers to support the qualitative data we are using to demonstrate the Oranga Program's impact.

Appendix A: Proposed Outputs & Indicators

Definitions we're using:

- Output
 - A measure that shows the activity of a program (i.e., a receipt of service delivery). Outputs show how and where a program is active and is doing things but doesn't necessarily indicate any change because of activities.
 - Example: # of training activities completed on Kauri kaitiakitanga

• Indicator

- A measure that is intended to show changes that a program or activity brings (in people, communities, policies, etc.). Different from outputs because it is directly measuring program outcomes rather than tracking the activity of a program
 - % of and stories (examples) from participants reporting an increased understanding of a healthy environment

Short-term Outcomes

- Increased understanding of a healthy environment (Understanding of species present, people, relation, synergy, ecosystems, Lore, Kauri Ora; Linked Values: Knowledge; Recognition)
 - Possible outputs:
 - # of educational sessions completed on Kauri kaitiakitanga (e.g., presentations or training between projects and rohe/iwi; including geographic location if possible)
 - # of participants at educational sessions (reach)
 - # of passive and active resources created on what constitutes a healthy environment by projects (e.g., videos, pamphlets)
 - # of times resources are viewed or given out
 - Possible indicators:
 - # of and self-report from participants of increased understanding of a healthy environment (general, but includes ability to identify species present and the synergies within a given ecosystem)
 - # of and self-report from participants of an increased understanding of kaitiakitanga of the forest
 - # of and self-report from participants about an increased ability to list the indicators of a healthy forest (e.g., sounds, whakapono/energy)
 - # of and self-report from participants about an increased understanding of the lore of the forest and Kauri
 - # of research projects initiated and completed (measured separately) that intends to explore
 what constitutes a healthy environment from a Māori perspective (e.g., vibrations in the forest)
 - # of articles published from research findings (grey literature, academic literature, etc.)

- Increased connections with and between iwi (Including partnerships, relationships; also including with projects/researchers; Linked Values: Relations, Mentorship)
 - Possible outputs:
 - # of meetings between projects and iwi and/or landowners (in-person or virtual)
 - Amount (\$) allocated annually to facilitating connections with and between iwi
 - # of formal partnerships or agreements (e.g., MOUs) between projects and iwi and/or organizations (general agreements to work together)

• Possible indicators:

- # of times iwi refer or connect projects to another iwi/rohe/landowner
- # of repeat visits between iwi and projects (per project)
- # of cross over visits between iwi and different projects in the program (i.e., one project facilitates a meeting with another project with the same iwi)
- Self-reported increase in connections between iwi and projects (from both perspectives, if possible)
- Self-reported impact of any increased connections between iwi and projects (specifically looking for mentorship in Kauri ora)
- Increased overall iwi and research capacity in research, community kaitiakitanga (demonstrated through connections, relationships, and administration from the projects; Linked Values: Mentorship, Sustainability & Preservation)

• Possible outputs:

- # of training sessions offered by projects to iwi and/or organizations (e.g., field training on seed storage, taking care of Kauri, etc.)
- # of community visits and/or meetings (in-person or virtually) with the purpose of enhancing capacity or kaitiakitanga infrastructure
- Amount (\$) allocated annually to increasing the capacity of iwi, organizations, and/or projects for the kaitiakitanga of the Kauri
- # of partnerships or agreements (e.g., MOUs) focused on increasing the capacity of iwi and/or organizations

• Possible indicators:

- # of individuals from iwi contributing to projects (per project; includes advisory committees, research, facilitation of training, etc.).
- # of and self-report from iwi and projects about increases or revitalizations of capacity for kaitiakitanga of the forest
- # of and self-report from iwi and projects about the confidence they have to fulfill their obligation to take care of the Kauri
- # of and self-report from iwi on increases in capacity for Māori/community led research (e.g., how-to, avenues to take, access to resources)

 Enhanced focus on and acceptance of the Māori worldview (Related to the environment, thinking, ensuring things aren't always black and white; Linked Values: Recognition, Transform, Sustainability & Preservation, Equity and Respect; Renew; Sovereignty)

• Possible outputs:

- # of meetings with non-Māori leadership about Māori led kaitiakitanga approaches (e.g., government ministries, conservation organizations, etc.)
- # of meetings with iwi, kaumatua, and/or tohunga on incorporating Māori worldviews into projects

• Possible indicators:

- # of non-Māori land owners asking for projects' assistance in taking care of Kauri
- # of requests from non-Māori sources for projects to give presentations and/or informational sessions (including media)
- Amount (\$) leveraged in additional funding (i.e., agreeance that work should continue)
- # of and self-report from participants about a broadened perspective of healthy ecosystems (i.e., one that includes a Māori worldview)
- # of and self-report from non-Māori participants about increases in cultural acknowledgement, understanding, and proficiency in their own and others work (including on how it relates to research approaches)
- # of 'spin-off' projects created out of the mahi of projects (ones outside of the program's scope)

Intermediate-term Outcomes

• Revision of harmful policies to Kauri and those responsible for protecting them (Includes protecting Kauri and Kauri Ora; Linked Values: Renew, Transform, Sovereignty, Equity/Respect, Recognition)

• Possible outputs:

- # of Kauri kaitiakitanga advocacy activities facilitated by the projects (e.g., advocating for change via the media or through other public means)
- # of meetings with non-Māori policymakers and governments (all levels) regarding policy change on Kauri kaitiakitanga
- # of meetings with iwi and/or Māori policymakers regarding policy change on Kauri kaitiakitanga
- # of anti-racism events, informational sessions, and/or advocacy initiatives completed by projects
- Possible indicators:
 - # of times Māori intellectual property is used with and without consent (counted separately) in policy creation or intervention creation (relevant to Kauri kaitiakitanga)
 - # of times iwi/Māori is respected and infringed upon (counted separately) in efforts to protect the Kauri

- # of Kauri kaitiakitanga policies changed to better reflect Māori perspectives and/or findings/mahi from the projects (include specific policies before/afters if possible; Aotearoa wide)
- Self-reported impact of policy changes/revisions from participants and project members
- **Promotion (lifting up) of kaumatua, tohunga, and Māori research (**Includes actively providing a platform, enabling of work; **Linked Values:** Knowledge, Relations, Mentorship, Renew)
 - Possible outputs:
 - # of events, initiatives, or public efforts to promote Māori in the Kauri kaitiakitanga space
 - Amount (\$) allocated to infrastructure that facilitates kaumatura, tohunga, and/or Māori researcher participation in the projects
 - # of new job/research positions created for Māori individuals from projects

• Possible indicators:

- # of kaumatua, tohunga involved in project research and/or implementation (over time; including analysis of data)
- # of Māori researchers involved in project implementation (over time)
- # of Māori community members involved in project research and/or implementation (over time)
- Self-report from kaumatua, tohunga, Māori community members, and researchers on the level to which the projects have enabled them to work on Kauri kaitiakitanga (including examples of)
- Self-reported frictions or struggles when trying to do the work (i.e., instances where they do not feel enabled)
- Increased appropriate knowledge translation (The flow of information to and from communities (including protocols of what is and isn't shared; Linked Values: Renew, Transform, Sustainability & Preservation, Relations)
 - Possible outputs:
 - # of knowledge transfer/exploration sessions completed (e.g., presentations or training between projects and rohe/iwi; including geographic location if possible)
 - # of participants at knowledge transfer sessions (reach)
 - Possible indicators:
 - # of times Māori intellectual property is used with and without consent (counted separately) in policy creation or intervention creation (relevant to Kauri kaitiakitanga)
 - Self-reported examples of proper and improper use from projects and/or participants
 - Self-report from iwi regarding utu/reciprocity between them and projects on knowledge taken/given back

Long-term Outcomes (Impact of Oranga)

- Increased ability to protect and nourish the Kauri and Kauri Ora (Linked Values: Sustainability & Preservation, Renew, Transform, Sovereignty, Equity & Respect)
 - Possible outputs:
 - # of visits to individual Kauri (over time, per project)
 - # of times project-led solutions are used to remedy Kauri ora (over time, per project)

• Possible indicators:

- # of healthy Kauri Ora in Aoteoroa (as determined by iwi and projects)
- Self-report from iwi, kaumatua, and tohunga on the state of Kauri ora/kaitiakitanga (including any influence the projects had on that state)
- # of times phosphite injections are used (per year, looking for a decrease)
- Amount (\$) allocated from non-program sources focused on maintaining or increasing the work of the projects (e.g., ministry funding)
- Number of iwi and land owners using project led solutions for Kauri kaitiakitanga (list type if possible)
- Self-reported impact of using project led solutions over other methods (e.g., phosphite injections)