Coastal People: Southern Skies National Centre of Research Excellence

Aotearoa New Zealand has over 15,000 km of coastline. In 2016, 75% of all New Zealanders lived within 10 km of the coast. Our connection to the sea is shared with our neighbouring South Pacific Island nations. Coastal seas, the sensitive interface between the land and open ocean, have been degraded by resource extraction, development, and pollution over hundreds of years. Coastal people have an inherent connection to coastal ecosystems, and their culture, local economy and well-being has declined in concert with ecosystem degradation. After a period of unprecedented local change, the ripples of broader global-driven change are also having impacts on coastal ecosystems and the values these hold. These coastal ecosystems will be further undermined by intensification of ocean warming, sea level rise and ocean acidification - these will affect community well-being. Dwindling fisheries and polluted waters have turned people away from traditional ways of life and led to conflict. Only through abundant fisheries, healthy coastal habitats, and environments – restoring the mauri (life blood) – can the culture, economies and well-being of coastal communities be restored and bolstered to face a changing climate.

Coastal People: Southern Skies (CPSS) is a collaboration that connects communities across Aotearoa New Zealand and the South Pacific with world-leading, cross-disciplinary research to support transformative change to rebuild our fragile coastal ecosystems. CPSS is funded by the Tertiary Education Commission as a Centre of Research Excellence (CoRE). CPSS will support local communities by providing information and tools that allow local scale responses to globally driven change in the marine environment (e.g ocean warming and acidification, sea-level rise).

CPSS has assembled a cross-disciplinary research team from both traditional and non-traditional partners to achieve its research goals. CPSS recognises the intention of Centre of Research Excellence funding is to support growth in research excellence and the development of world-class researchers in areas of existing excellence that are important to Aotearoa New Zealand's future development. As such, CPSS has developed a research programme that fulfils the objectives within the Statement of National Education and Learning Priorities (NELP) and the Tertiary Education Strategy (TES) and is responsive to community needs. We recognise that the students we train are the leaders of tomorrow be that in industry, policy, education or research and our integrated approach will ensure these leaders are equipped with a world-class skill set. We will work closely with coastal communities. Our students and researchers will have opportunities afforded to them that will contribute to their growth and development outside of the "traditional" tertiary environment.

Central to CPSS is supporting local leadership and in developing leaders of tomorrow. Coastal people face the consequences of changing climate, but also hold the hope, knowledge, and potential to build resilience for their places and ways of life in a changing climate. CPSS's research and training programme is based on a voyaging waka – one hull symbolising the health of ocean (Marine) and the other the health of people (Well-being). Both hulls are linked by platform research themes (Connecting, Understanding, Restoring) and driven forward by the sails (Innovation, Voyaging) yet grounded in place by moorings (Training and Monitoring). We will

share our research and ways of working with communities and the stories of our community partners and bring hope and clear strategies for local action as we prepare for what will come.

Our vision is flourishing wellness (mauri ora) of coastal communities. Our mission is to connect, understand and restore coastal ecosystems of Aotearoa New Zealand and the Pacific through transformative research, local action and by unlocking potential through new pathways to learning. Our values are central to all that we do, and all our actions are underpinned by these values; our values are based on KAITIAKITANGA and MANA (MEANINGFUL, AUTHENTIC, NATURAL, ACTION).

1. Research Priorities

1.2.2 Ngā kōwhiringa hoahoa Whakaarotau Matua Priorities design
Question 1. What principles could be used to determine the scope and focus of national research Priorities?

- Mana: the ability for Māori, Pacific, rural and all New Zealanders to be involved in setting the nation's research priorities.

- Kaitiakitanga: national research priorities that privilege kaitiakitanga to benefit all New Zealanders.

1.3.2 Ngā kōwhiringa hoahoa mō te tukanga tautuhi whakaarotau Priority-setting process
Question 2. What principles should guide a national research Priority-setting process? How can the process best give effect to Te Tiriti?

- The principles described above should guide the priority-setting process.

- This process can best give effect to Te Tiriti through:
    - Article 1: kāwanatanga
        - Māori governance over the Māori research, science and innovation (RSI) sector.
        - We support the Te Pūtahitanga submission for creating an Independent Māori Authority.
        - Māori influence on the national RSI agenda based on a Māori-Crown relationship which amplifies mātauranga Māori, te Tiriti o Waitangi, and kaitiakitanga.
    - Article 2: tino rangatiratanga
        - Māori setting the national RSI agenda which includes benefits for all peoples in Aotearoa.
        - We support the Te Pūtahitanga submission for creating an Independent Māori Authority.

- Māori influence on the national RSI agenda based on a Māori-Crown relationship which amplifies mātauranga Māori, te Tiriti o Waitangi, and kaitiakitanga.

  o Article 3: ōritetanga

    - Māori and the Crown share decision making in the setting of national research priorities. Resourcing priorities and sources are co-determined. Mātauranga Māori and science have equal status.

    - There is equity of outcomes for Māori and all New Zealanders

1.4.2 Ngā kōwhiringa hoahoa whakahaere matua. Operationalising priorities
Question 3. How should the strategy for each national research Priority be set and how do we operationalise them?

- Ensure there is an effective process to engage Māori, Pacific, rural and local communities in setting the agenda.

- Build upon existing research strengths to amplify research priorities in areas where there is sufficient capability or a strategic approach to growing that capability.

2. Te Tiriti, mātauranga Māori and Māori aspirations

2.2 Te huarahi e marohitia ana. Engagement
Question 4. How would you like to be engaged?

- CPSS support engagement with iwi, hapū, whānau firstly in a Te Tiriti relationship.

- CPSS supports engagement with Te Pūtahitanga.

- CPSS can offer the perspective of early-mid career researchers and can provide feedback and input to the process.

- CPSS would welcome the opportunity to submit on any draft proposals.

2.3 Te whakamana me te whakahaumaru i te mātauranga Māori. Mātauranga Māori
Question 5. What are your thoughts on how to enable and protect mātauranga Māori in the research system?

- Kaitiaki rights and privileges must be adhered to and properly resourced in the guardianship of mātauranga as per the WAI262 findings which often is found at the whānau, hapū and iwi contexts in collectives or organisations that exist outside of the current RSI system.

2.4 Te whakapakari hononga ki te mātauranga Māori ā-rohe Regionally based Māori knowledge

Question 6. What are your thoughts on regionally based Māori knowledge hubs?

- We support regionally based Māori knowledge hubs in alignment with iwi and hapū boundaries which are appropriately resourced, designed by these communities, including intentional capability building programmes so that communities are not overburdened.

- Consideration should be given to Māori knowledge hubs have representatives from the research community alongside iwi, hapū and whānau representatives (as appropriate).

3. Funding

3.2.1 Ngā kōwhiringa matua mō ngā taumahi matua Core functions

Question 7. How should we decide what constitutes a core function and how do we fund them?

- Building in equitable outcomes for Māori, Pacific and rural peoples is critical.

- The system, and therefore the components of the system, need Te Tiriti built into all aspects. This is a difficult goal to achieve as this requires a decolonisation of the current system whilst a Te Tiriti system is created.

- Imperative is that Te Tiriti (as previously described) is embedded:
  - Kāwanatanga
    - Funding for a Māori governed RSI system
    - Funding for an Independent Māori Authority
    - Funding for Māori influence in the RSI system
  - Rangatiratanga
    - Increased funding in rangatiratanga space for
      - Funding for a Māori governed RSI system
      - Funding for an Independent Māori Authority
      - Funding for Māori influence in the RSI system
  - Ōritetanga
    - Equitable funding for equitable outcomes

3.3.2 Ngā kōwhiringa hoahoa mō tētahi tauira tuku pūtea hou. Establishing a base grant and base grant design.

Question 8. Do you think a base grant funding model will improve stability and resilience for research organisations, and how should we go about designing and implementing such a funding model?

- We support the base funding model in particular for whānau, hapū, iwi, Pacific and community-based research organisations.

- This will provide funding over a longer period of time and provide continuity enabling longer-term research goals.

- The model should be developed in consultation with selected whānau, hapū, iwi, Pacific and community-based research organisations including those who have been unable to be successful within the current model.

4. Institutions

4.4.1 Te āhua, whakaruruhau me te hanganga o te whakahaere Institution design
Question 9. How do we design collaborative, adaptive and agile research institutions that will serve current and future needs?

- Centres of Research Excellence are a positive example of collaborative, adaptive and agile research institutions which have the dual focus on research excellence and capability building.

- We support whānau, hapū, iwi, Pacific and community-based research organisations including Māori regional hubs.

- We support the Te Pūtahitanga submission for creating an Independent Māori Authority.

4.4.2 Te whakawhanaketanga me te tautiaki pai ake o te hunga mahi me te raukaha Role of institutions in workforce development
Question 10. How can institutions be designed to better support capability, skills and workforce development?

- Centres of Research Excellence are a positive example of how institutions can be designed to better support capability, skills and workforce development.

- A gap in the system is at postdoctoral funding and permanent research positions (both within and outside of the "traditional" institutions in the RSI system).

- The funding expectations for early career researchers (including postdoctoral fellows) limit opportunities for development. Consideration should be given to the requirement to have these roles fully cost recovered ie ideally no overheads on these roles.

- There needs to be intentional investment in Māori and Pacific workforce development goals including leadership and professional development

- There needs to be intentional investment for non-Māori and non-Pacific peoples to facilitate understanding on how to engage as tangata Tiriti, and allies.

4.4.3 Te ruruku pakari ake me te arotautanga o ngā haupū rawa me ngā rawa nunui Better coordinating property and capital investment

Question 11. How should we make decisions on large property and capital investments under a more coordinated approach?

- Consideration should be given to providing infrastructure to support aspirations of Māori communities under Te Tiriti.

4.5 Te tautoko i ngā wawata o te Māori. Institutional design and Te Tiriti
Question 12. How do we design Tiriti-enabled institutions?

- Important steps in re-designing a Te Tiriti enabled system and its institution are:
  - a programme of decolonisation
  - power sharing
  - governance
  - ultimate decision making resting with Māori

- Imperative is that the articles of Te Tiriti (rather than the principles) guide the process
  - Kāwanatanga
  - Rangatiratanga
  - Ōritetanga

4.6 Ngā pāpātanga pai ake – te whakawhiti mōhiohio me ngā pāpātanga rangahau Knowledge exchange
Question 13. How do we better support knowledge exchange and impact generation? What should be the role of research institutions in transferring knowledge into operational environments and technologies?

- Ensuring Māori regional hubs, if established and resourced appropriately, can contribute to this, for example where research is co-developed and produced with communities throughout the research process.

- Recognition of the value of input outside of the traditional research sector.

- Provision of training opportunities to research institutions (as discussed previously) will support meaningful knowledge exchange.

5. **Research Workforce**

5.2 Ngā whakaarotau me te hunga mahi rangahau Workforce and research priorities
Question 14. How should we include workforce considerations in the design of national research Priorities?

- A high value economy is dependent on a high value workforce with the skills and capability required. The design should include and promote opportunities for diversity in training (such as the ability to undertake internships).

- The needs of Māori- and Pacific-led organisations and their workforce requirements.

5.3.1 Ngā pūtea me te hunga mahi rangahau Base grant and workforce.
Question 15. What impact would a base grant have on the research workforce?

- We support base grants for the research workforce.
    - There is significant career precarity for early career researchers, and all researchers on "soft money".

- This will create opportunities for researchers to be based within "non-traditional" research organisations in the RSI system such as whānau, hapū, iwi, Pacific and community organisations.

5.3.2 Ngā tikanga tuku pūtea hou Better designed funding mechanisms
Question 16. How do we design new funding mechanisms that strongly focus on workforce outcomes?

- We support a return to the Te Tīpu Pūtaiao Fellowships (Masters, PhD, Postdocs), or equivalent programme, with the addition of permanent lectureships that can be held anywhere in the RSI system (including whānau, hapū, iwi, Pacific and community organisations for example).

6. Research Infrastructure

6.2.2 Ngā kōwhiringa hoahoa matua mō te tuku pūtea ki te hanganga rangahau Research funding research infrastructure
Question 17. How do we support sustainable, efficient and enabling investment in research infrastructure?

- It is critical that environmentally conscious choices are made to mitigate impacts of climate change.