A holistic assessment of certain land-uses to increase sustainability in Aotearoa

We are offering a fully funded 6-month masters scholarship ($11,000 total) based at Te Aka Mātuatua – School of Science, Waikato University in Hamilton, New Zealand. This project will take place between Nov 2022 and April 2023 and is aligned with an ‘Our Land and Water - think piece’ grant. The successful candidate will carry out a holistic assessment of certain land-uses to increase sustainability in Aotearoa. They will have the opportunity to work in a transdisciplinary team with scientists from multiple research institutions and māori groups. The successful candidate will be enrolled in either an earth, environmental, or other relevant sciences masters degree, intending to do a 60 point dissertation, and have a previous average mark of A.

BACKGROUND: The degradation of the environment caused by intensive primary production systems is questioning which land-uses are appropriate and where, and how to manage them to minimize their environmental impacts. In New Zealand, the increase in water pollution linked to intensification of dairy farming, and the government adoption of international agreements on Climate Change are forcing/encouraging many farmers or primary producers to change the management of their land to claimed sustainable practices, or change land-use to other productive systems which are regarded as less polluting.

PROJECT: The objective of this masters project is to identify the long-term consequences of land-use changes, using the Nikau Farm as a case study. To achieve this objective, the candidate will work closely with the rest of the team to identify the land-uses or land-use combinations that the Nikau Farm are testing in their farm or have plans to test in the future. The candidate will conduct a scope literature review to identify the available scientific evidence that demonstrate the benefits or constraints of each land-use. Most importantly, the candidate will identify knowledge gaps or contradictory evidence, which will ensure the need for further research.

SUPERVISORS: The MSc candidate will be supervised by Alexandra Meister from ESR (Alexandra.Meister@esr.cri.nz) and Tanya O’Neill (toneill@waikato.ac.nz) from Waikato University. For further information please see: https://ourlandandwater.nz/news/announcing-20-new-research-projects/ (under Land-Use Scenarios for Nikau Farm) or contact Alexandra or Tanya.
Eligibility criteria:

The successful candidate will have:

1. enrolled in a master's degree in a relevant discipline (e.g., environmental or other relevant science) and intending on undertaking a 60-point (6 month dissertation), able to start in November 2022;

2. an interest in both available scientific evidence and mātauranga-based knowledge; and

3. good grades (ideally A average) for 300-level and beyond past papers.

Application documents required:

- CV with copies of academic transcripts
- A personal statement (max 1 page) related to the research project (including your interest, your motivation to work in this field, and what experience and skills you will bring to the team and project)
- Contact details of three references (at least two academic).

Please send all of the above to Drs Alexandra Meister (Alexandra.Meister@esr.cri.nz) and Tanya O’Neill (toneill@waikato.ac.nz). Incomplete applications will not be considered. Review of applications will begin Aug 1 2022 and continue until the position is filled. Final acceptance is subject to the approval of the University of Waikato postgraduate studies office.

Closing date:
Ongoing review of applications from 1st of August 2022.