EXTERNAL ORGANISATION: NIWA National Institute of Water and Atmospheric Research
SUPERVISOR/S: Deb Hofstra (NIWA) and Conrad Pilditch (UoW)
PROJECT TITLE: Cultivation and restoration of macrophytes
FIELD: Freshwater Ecology/ Earth Science
PROJECT LOCATION: NIWA Hamilton

PROJECT AIM:
Cultivation and restoration of macrophytes

PROJECT ABSTRACT:
This is one of several projects offered under the umbrella of Te Kūwaha, NIWA’s Māori Environmental Research Group in collaboration with the University of Waikato. Te Kūwaha assists Māori communities throughout Aotearoa-New Zealand by providing support through both mātauranga Māori and science-based knowledge, tools and resources to assist in the management of natural resources. This project provides an excellent opportunity for students wishing to bridge western science and mātauranga Māori research in marine and freshwater ecosystems. This project will synthesise scientific knowledge held across NIWA research programmes and teams to develop guidance on the cultivation and restoration of native macrophytes for environmental rehabilitation initiatives in freshwaters (including coastal wetlands). It responds to the aspirations of iwi, hapū and whanau to be further involved in restoration. Māori have a strong track record in the development of native plant nurseries for terrestrial and riparian restoration and this project would assist in the extension of that capability to in-water environments.

STUDENT SKILLS:
• Must have understandings of tikanga Māori and be comfortable in Māori settings
• Must be highly motivated and hard working
• Must have initiative and enjoy working as part of a team
• Should have some level of knowledge/understanding of freshwater ecology/Māori perspectives/ research
• Pay attention to detail and have an ability to work to a high standard
• Be competent using Microsoft Excel and Word
• A full drivers licence would be useful but not essential

PROJECT TASKS:
• Become familiar with the laboratory environment
• Collect and analysis data from experiments, and prepare a written summary of results
• Present findings at team meetings
• Participate in other workstreams associated with the overarching project aim

EXPECTED OUTCOMES:
• Student’s Research Poster (as per clause 6 of the Scholarship regulations)
• The project will trial different cultivation techniques.
• The project will result in the collation of data from several workstreams to inform guidance documents at the conclusion of the wider project
• The project will provide an amazing opportunity for an emerging researcher to experience a combination of laboratory and field work within a multi-disciplinary team