

From Biosecurity to Restoration

Dr Deborah Hofstra¹, Mr Paul Champion¹, Ms Mary de Winton¹

¹*Niwa*

Alien pest species are considered second only to habitat loss as the prime drivers of biodiversity decline in freshwaters globally. In New Zealand, submerged aquatic weeds and pest fish are radical transformers of aquatic ecosystems, contributing to deteriorating water quality, declines in native biodiversity and reduced associated values and natural capital. While there is a growing desire to improve or restore freshwater ecosystems, a major obstacle to restoration is overcoming the pervasive and escalating nature of impacts from invasive pests.

A number of control tools have been developed to manage pests as biosecurity interventions (responses). However, a step change is required in the application of these tools to achieve restoration of affected systems. Case studies from New Zealand lakes are utilised to provide examples of where biosecurity actions to reduce or remove invasive aquatic plants provides a window of opportunity for restoring native aquatic vegetation.