

## The research behind New Zealand's aquatic weed eradication programmes

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**Summary** Six aquatic plants were selected amongst 11 organisms included in the Ministry for Primary Industries national eradication programmes, known as National Interest Pest Responses (NIPR). The six weeds chosen were *Phragmites australis*, *Hydrilla verticillata*, *Zizania latifolia*, *Ceratophyllum demersum*, *Eichhornia crassipes* and *Salvinia molesta*. These species were selected based on several factors relating to the assessment of environmental, economic, cultural, recreational and health risks. This assessment included their current distribution, dispersal pathways, environmental and potential distribution and characterisation of likely impacts. Additionally, evaluation of current and future control tools was undertaken

and the formulation of the best available tools needed for eradication was carried out, including an assessment of uncertainty. In some cases, the tools required for eradication were not approved for use in aquatic environments, and the research and advocacy steps needed to facilitate tool use, compliance and monitoring are outlined. Monitoring was also undertaken to ensure programme effectiveness and catalogue any unintended off-target impacts. All programmes have made significant progress since the inception of NIPR in 2008, with *C. demersum* eradicated from the target area.

**Keywords** Weed risk assessment, impact assessment, control tools, monitoring.