

10 Methods

Develop best practice methods for protecting and restoring freshwater wetland ecosystems.
NATIONAL / REPORT CARD 2015

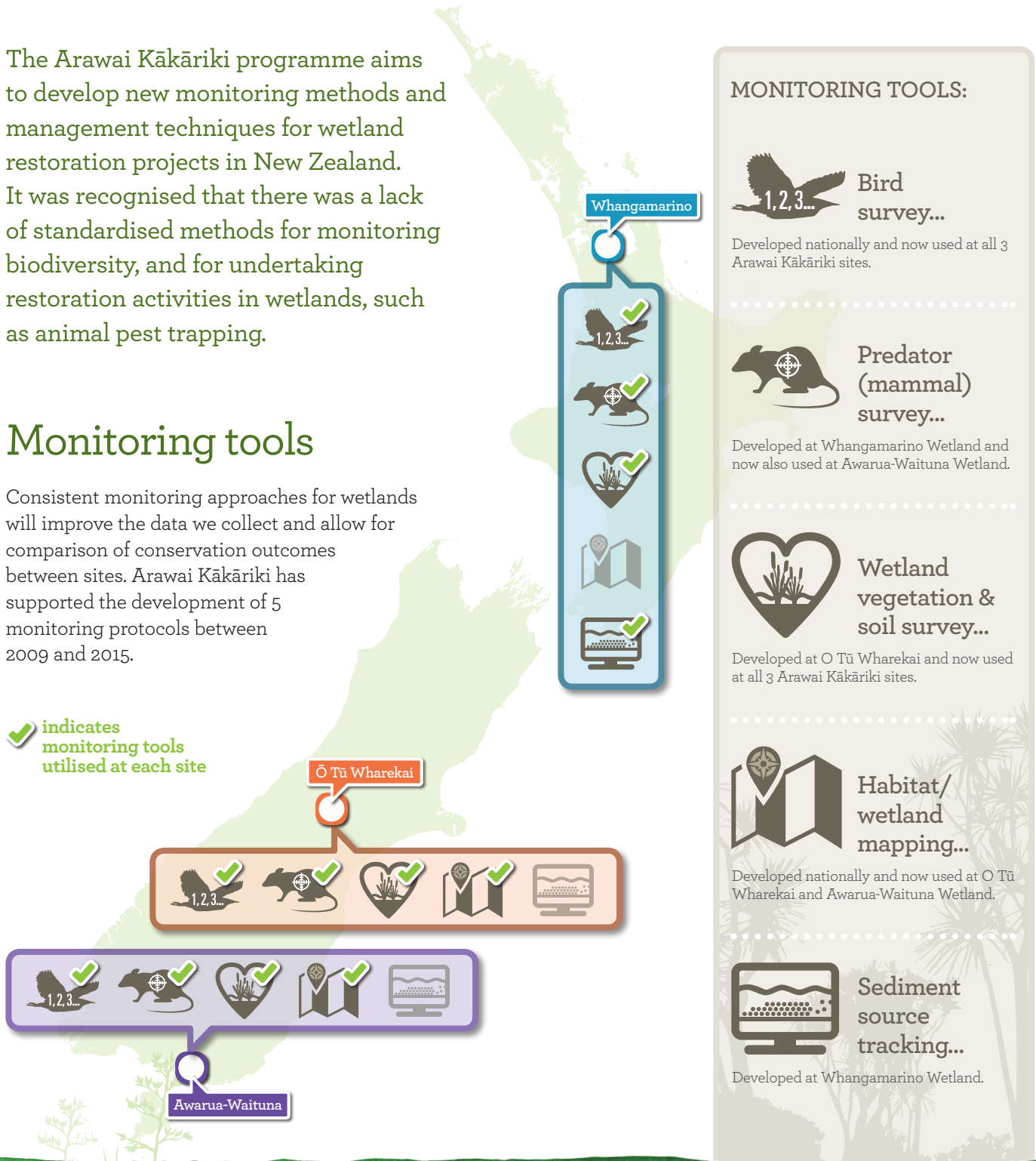


The Arawai Kākāriki programme aims to develop new monitoring methods and management techniques for wetland restoration projects in New Zealand. It was recognised that there was a lack of standardised methods for monitoring biodiversity, and for undertaking restoration activities in wetlands, such as animal pest trapping.

Monitoring tools

Consistent monitoring approaches for wetlands will improve the data we collect and allow for comparison of conservation outcomes between sites. Arawai Kākāriki has supported the development of 5 monitoring protocols between 2009 and 2015.

indicates monitoring tools utilised at each site




Use of monitoring tools


The monitoring tools developed as part of Arawai Kākāriki are suitable for wetlands across New Zealand. Below we illustrate how the tools are being applied to benefit conservation.




 UNIQUE FEATURE OF TOOLS	 HOW METHOD IS APPLIED
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 Bird survey...	New approach to survey of wetland birds (bittern, crake and fernbird)	<ul style="list-style-type: none"> • New observations of threatened bittern using automatic recorders • Citizen science growing as community groups use methods
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 Predator (mammal) survey...	Predator monitoring suitable for wetland environments	<ul style="list-style-type: none"> • Predator control informed by population counts for mustelids, cats, and rats
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 Wetland vegetation & soil survey...	Use of a vegetation plot network to measure wetland health	<ul style="list-style-type: none"> • New wetland monitoring programmes underway by regional council • Nutrient impact on wetlands recognised
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 Habitat/wetland mapping...	Systematic mapping of wetlands and dominant vegetation using GIS	<ul style="list-style-type: none"> • Reporting on wetland loss due to drainage • Weed spraying better informed from vegetation maps
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 Sediment source tracking...	Stable isotope technique determines the causes of sediment build-up in wetlands	<ul style="list-style-type: none"> • Catchment management able to target critical sediment sources
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NEXT ACTIONS...

Arawai Kākāriki sites have provided a focal point for developing wetland monitoring tools, however need to get better at publishing and communicating the results to a wider audience.

 **Publish...**
monitoring methods is of the highest priority

 **Share...**
monitoring tools to improve wetland management across New Zealand

 **Review...**
continue to assess the value of monitoring tools