

Lake Waikare and Whangamarino Wetland Catchment Management Plan

Part two: Actions

Final for discussion

26 July 2018

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Acknowledgments:

Many individuals and organisations contributed to the content of the catchment management plan and its inputs; some of this input has been indirect yet instrumental to identifying a way forward (e.g. the actions from the Waikato and Waipa River Restoration Strategy). These include but are not limited to:

Auckland/Waikato Fish & Game (David Klee, Anna Sintenie)
Department of Conservation (Ray Scrimgeour, Lucy Roberts)
Helen Ritchie (Facilitator of Leadership Forum)
Julian Williams (Te Huia Natural Resources Limited)
Kelly Deihl (independent environmental consultant supporting the PSCT)
Lower Waikato Catchment Committee members (Councillors, community, industry and iwi members)
Malcolm Lumsden
Ngaa Muka Development Trust (Glen Tupuhi and previous Chair, Moko Tauriki)
Primary Stakeholders Catchment Trust (PSCT) (including Chair – Jim Cotman, Kirstie Hill, Chris Falconer, Murray Twining, Trevor Simpson, Brendan Balle, Jason Barrier and David Short)
Sue Ira (Koru Environmental Limited)
Waikato District Council
Waikato Regional Council's Communications Team
Waikato Regional Council's Integrated Catchment Management Directorate
Waikato Regional Council's Science and Strategy Directorate
Waikato River Authority (Keri Neilson)
Waikato Tainui (Taroi Rawiri, Eric Pene, and previous representative Tim Manakau),
Waahi Whaanui Trust (Hori Awa and previous representative, Taroi Rawiri)

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1 Introduction

As detailed in Part One of the Lake Waikare and Whangamarino Wetland Catchment Management Plan (CMP); a catchment is defined as a geographical drainage area of a river and its tributaries. The Lake Waikare and Whangamarino wetland catchment area includes the sub-catchments of Lake Waikare, Whangamarino wetland, Whangamarino River, and the Matahuru and Waerenga streams. The catchment drains via the Whangamarino River into the Waikato River between Meremere and Mercer.

This CMP is formulated to help **address issues** identified within the Lake Waikare and Whangamarino wetland catchment; and provides a framework to be utilised to **guide future work programmes** of all those involved with the catchment's management and development. The CMP will also assist in obtaining resourcing and funding to deliver specific actions and recommendations outlined in the implementation and action plan.

As the CMP is a non-regulatory and non-binding document; no organisation or individual is bound by the implementation and action plan. If there are actions identified on private land, the landowner is not obliged to undertake them, or to allow others to undertake them. Nor do the actions presented in this Part bound the Waikato Regional Council or other organisations to fund or enact these actions. Waikato Regional Council and local authorities funding occurs through their Long Term Plan and Annual Plan processes, while national organisations such as the Department of Conservation and the Auckland/Waikato Fish and Game Council have their works programmes funded through their legislative mandates and central budgets. Consequently, if the outcomes sought from the CMP are deemed important for the community, it is important for the community to advocate CMP implementation to provide support for these organisations to secure adequate and sustained funding.

The Waikato River Authority funding is governed through the Waikato-Tainui Deed of Settlement which was passed into law in May 2010. The funding focus is signalled each year through its annual funding statement and will be guided by the priorities identified in the Waikato and Waipa River Restoration Strategy. The CMP will directly inform Waikato Regional Council's identification of funding and projects within this catchment.

1.1 Purpose

Waikato Regional Council's strategic direction guides work and sets priorities for the Council's work up to 2019. It also reflects community desires and needs and identifies key factors that will determine whether the council is successful in achieving its strategic direction.

Priorities under the Council's strategic direction which are aligned to the implementation of this CMP include:

- Support **communities** to take action on agreed outcomes.
- Forge and strengthen **partnerships** to achieve positive outcomes for the region.
- Positively influence future **land** use choices to ensure long term sustainability.

- Manage **freshwater** more effectively to maximise regional benefit.
- Increase communities understanding of **risks and resilience** to change.
- Shape the **development** of the region so it supports our quality of life.

The implementation of the CMP will assist the council in delivering its strategic direction (Waikato Regional Council, 2017).

In addition, an overarching CMP purpose has been developed and has been defined through the CMP development consultation process undertaken to date.

CMP Purpose:

“Conserve, enhance and, where appropriate, restore the river, land and wetland environment through effective land, water and resource planning across the Lake Waikare and Whangamarino wetland catchment; through a coordinated, collaborative approach”.

With the CMP’s continued development and implementation, the overarching CMP purpose will be ultimately achieved.

1.2 Plan structure

The CMP forms part of a broader lower Waikato zone management planning and implementation work programme that guides future work programmes within the Lake Waikare and Whangamarino wetland catchment. The CMP will be crucial in obtaining funding to deliver specific operational actions, as outlined in this implementation and action plan.

The CMP has been developed into two parts, as depicted in Figure 1. Part One of the CMP provides a detailed catchment description, an overview of the statutory, policy and institutional framework which this CMP forms part of; a detailed description of the key catchment issues and opportunities; and the strategic aims and objectives for this CMP.

Part One has also been informed through a ‘state of understanding’ process, whereby existing research and initiatives within the catchment have informed the key gaps and areas which require further work. In addition, consultation has also helped complete various parts of this CMP document.

Part Two of the CMP builds on the knowledge gained from the Part One process and provides an implementation and action plan to assist in achieving the overall purpose of the CMP.

Section 7 of Part One sets out the monitoring and review of the CMP, which is a vital component of the catchment management process and ensure objectives are achieved. It is anticipated that Part One of the CMP is unlikely to change remarkably over the short-medium term; therefore, it is recommended to review the full CMP (including both Part One and Part Two of the CMP) every ten years; and a review of Part Two (i.e. the implementation and action plan) every three years.



Figure 1: CMP structure

1.3 Implementation framework

This section provides an overview and explanation of the implementation framework that underpins the CMP, which is summarised by Figure 2.

In Part One of the CMP; key catchment issues and opportunities (including those identified through the consultation process) have been developed, which were also informed through a 'state of understanding' process where existing research and initiatives within the catchment were assessed.

Five 'management areas', which the key issues and opportunities relate to, have been identified. These management areas represent a predominant theme for the catchment, and the implementation of the CMP, with some issues and opportunities linking to a number of management areas.

For each management area, a strategic aim has been identified. Each strategic aim sets out a broad aspirational statement (which has been defined through the consultation process undertaken to date) for a given management area for the next 80 years. The Healthy Rivers: Plan for Change/Wai Ora: He Rautaki Whakapaipai uses an 80 year timeframe to meet water quality objectives, and this timeframe similarly was adopted for the CMP. The key catchment issues have helped to inform each strategic aim; and sets out an overarching aim to guide decision making and actions over this timeframe in order to achieve the overall CMP purpose.

For each of the strategic aims, there are a number of objectives which indicate how the CMP will be pursued. The objectives are flexible within the wider aims of the CMP and will be responsive to new information and future changes (e.g. legislative changes).

A summary of each management area and strategic aim is below, with further details of these and the corresponding objectives included in Part One of the CMP.

Management area	Strategic aim
CMP implementation	1. To ensure sound implementation of the CMP, giving practical effect to our community's economic, environmental, cultural and social aspirations.
Water management	2. To ensure water resources (quantity, quality and flood management) are managed sustainably to provide for the long-term wellbeing of the natural environment and community.
Soil and land management	3. To ensure soil and land resources are managed sustainably to provide for the long-term wellbeing of the natural environment and community.
Biodiversity	4. To ensure ecosystem health and resilience is monitored, protected and enhanced throughout the catchment.
Economic, social and cultural values	5. To recognise and protect people's economic, social and cultural relationships with Lake Waikare and Whangamarino wetland catchment.

Table 1: CMP Management Areas

Part Two of the CMP details an implementation and action plan that has been developed to represent achievable steps, actual activities and/or initiatives (“actions”) necessary to reach the aspirations set out in the strategic aims and objectives. The actions have, where possible, taken advantage of the key catchment opportunities, and address the key catchment issues.

Ultimately the implementation and action plan will achieve the overall CMP purpose and will address the key catchment issues and opportunities which have been identified.

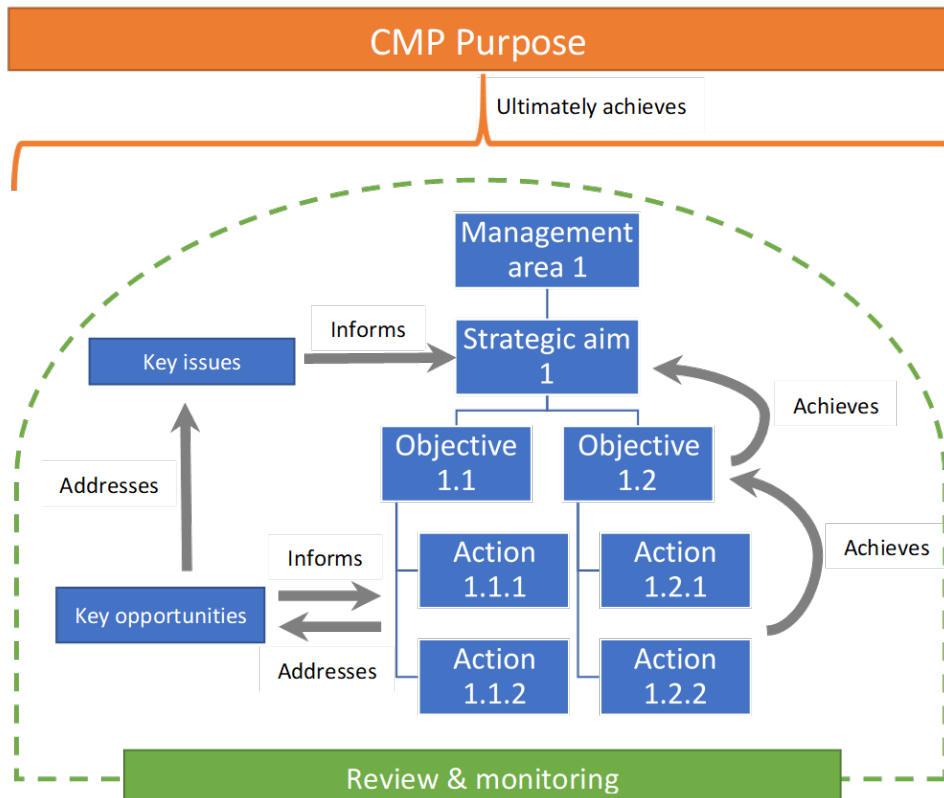


Figure 2: CMP implementation framework

2 Action plan

An implementation and action plan has been developed utilising available information and the work and consultation underpinning the development of the CMP. The identified actions represent some work that have already commenced (albeit in the first stages or could be expanded), newly identified projects and additional catchment scale assessments that could assist to inform future actions or iterations of the implementation and action plan. In addition, there are a number of other 'business as usual' actions that take place within the catchment (e.g. flood control, river management and land drainage), which are captured in further detail in the Lower Waikato Zone Plan.

The actions are intended to be progressed and tracked to strive towards the aspirations set out in the strategic aims and objectives, which ultimately assist in achieving the overall CMP purpose.

These actions have been grouped into three themes:

- catchment wide strategy;
- technical projects and processes; and
- on the ground implementation.

The identified actions are designed to work together to capitalise on multiple catchment opportunities, address multiple catchment issues, and to achieve multiple objectives (as identified in Part One of the CMP). The actions are focussed on the short to medium term, to achieve the longer term strategic aims and the overall CMP purpose.

Each action will be prioritised based on the Prioritisation Assessment Matrix to be developed as part of Action A6. This matrix will include an actions' priority based on several factors, including:

- Ability to achieve multiple CMP objectives and strategic aims;
- Linkages to other current and known project/policy priorities (e.g. Healthy Rivers PC1, the Waikato and Waipa River Restoration Strategy, and the Waikato Regional Prioritisation Project ("Waikato Lite"));
- Ease of implementation; and
- Cost and resource effectiveness.

The Waikato and Waipa River Restoration Strategy (Neilson, et al., 2018) includes priority projects for the Lake Waikare and Whangamarino wetland catchment. These priority projects (contained within the restoration strategy) have been incorporated as is, as they have been developed within a robust process through a number of collaborative workshops with stakeholders and interested parties. These projects have been prioritised within themselves (a particular restoration project ranked within the total restoration project list within the Waikato and Waipa rivers catchment) based on a recognised methodology adopted for that project.

It is anticipated that the implementation and action plan will be reviewed every three years, with progress monitored in accordance with the process identified in Section 7 of Part One of the CMP.

2.1 Catchment wide strategies

Several catchment strategies have been identified for potential development. The development of these strategies would build upon the CMP, particularly its strategic aims and objectives; to ensure a holistic and co-ordinated approach to the management of certain matters. This would also promote multi-agency management, resources and funding for implementation.

Key for action status:



Commenced Action



New Action

Action no.	Action	Key components / comments	Rationale/drivers/key issues	Strategic aim link	Healthy Rivers applicable ¹
A1	Develop a catchment pest animal/fish management strategy.	<p>The Regional Pest Management Plan (RPMP) 2015-25 lists pests and ways to address them within the region. The RPMP will be reviewed starting in 2018/19.</p> <p>The RPMP can be utilised as a starting point to identify status/current condition/priorities for management. (Note: Koi carp/catfish task force is formed and already underway).</p> <p>Department of Conservation and Waikato Regional Council have commenced a regional pest management strategy. This multi-agency approach will assist with combining available information and resources to implement a consistent and targeted approach for pest animal/fish management within the catchment.</p> <p>Existing project work underway/complete (as captured in Map 15: Environmental and restoration projects, within CMP Part 1):</p> <ul style="list-style-type: none"> • Project 8: Wetland predator project • Project 19: Lake Waikare fish pass koi carp trap and digester unit • Project 44: Lake Ohinewai invasive fish barrier and associated work 	<p>Aquatic pests such as koi carp and catfish impact upon the indigenous biodiversity of the catchment, and also contribute to the re-suspension of sediment within the lake.</p> <p><i>Note: A specific task force has been established to help implement this specific action.</i></p>	4 & 5	Refer to implementation method 3.11.4.4 d) work towards managing the presence of pest weeds and fish
A2	Develop a catchment pest plant management strategy.	<p>The Regional Pest Management Plan (RPMP) 2015-25 lists plant pests and ways to address them within the region. The RPMP will be reviewed starting in 2018/19.</p> <p>The RPMP can be utilised as a starting point to identify status/current condition/priorities for management.</p> <p>Existing work underway/complete (as captured in Map 15: Environmental and restoration projects, within CMP Part 1):</p> <ul style="list-style-type: none"> • Project 6: Arawai Kakariki: weed and pest control works, monitoring of threatened fauna • Project 9: Willow management and clearance • Project 27: Plant pest control at Te Onetea Stream, Lake Waikare and Whangamarino Wetland 	<p>Pest plants such as alligator weed and yellow flag iris, impact on the indigenous biodiversity of the catchment by smothering indigenous vegetation and have an economic impact on agricultural production. In 2009, NIWA undertook weed surveillance within the Whangamarino catchment (Bodmin, et al., 2009). In addition to alligator weed and yellow flag iris, there were a number of additional weeds designated as surveillance weeds in the Whangamarino wetland.</p>	4 & 5	Refer to implementation method 3.11.4.4 d) work towards managing the presence of pest weeds and fish

¹ based on current proposed Waikato Regional Plan Change 1 – Waikato and Waipa River Catchments

Action no.	Action	Key components / comments	Rationale/drivers/key issues	Strategic aim link	Healthy Rivers applicable ¹
A3	Identify and document existing key areas for high priority protection and/or enhancement for biodiversity.	<p>The Regional Prioritisation and Waikato and Waipa River Restoration Strategy have identified priority areas and interventions. This, along with any other relevant existing technical information and data to be collected and collated to form a works programme for biodiversity management within the catchment.</p> <p>A high level national biodiversity strategy has been developed by the Department of Conservation, while a Waikato Regional Council biodiversity strategy is a work in progress.</p> <p>Additional work can refine and update key areas for high priority protection and / or enhancement within the catchment.</p> <p>Existing works underway/complete (as captured in Map 15: Environmental and restoration projects, within CMP Part 1):</p> <ul style="list-style-type: none"> • Project 1: Kopuku Wetland restoration – Northern Whangamarino Wetland (Davies Block) • Project 2: Northeast Whangamarino Wetland restoration • Project 4: Land Owner WCEET wetland restoration project • Project 5: Whangamarino Wetland restoration (McLean Block) • Project 7: Eastern Whangamarino restoration (near Falls Rd) • Project 10: Cock's block restoration project • Project 11: Whangamarino biodiversity restoration of marginal farm land • Project 12: Kahikatea planting in Whangamarino Wetland • Project 20: Lake Waikare Northern Foreshore revegetation • Project 21: Lake Waikare Northern Foreshore wetland creation • Project 28: Manuka research project • Project 29: Waikare Urupa restoration project • Project 32: Waikaka lagoon wetland restoration • Project 33: Tree Planting at Penewaka Lagoon, Rangiriri - DOC • Project 41: Lake Rotokawau diversion drain and wetland creation for silt/nutrient treatment • Project 42: Lake Ohinewai – peat lake restoration • Project 43: North Oninewai – wetland restoration 	Land use changes have, over time, led to a further fragmentation and degradation of indigenous vegetation and habitat.	1, 2, 3, 4 & 5	Refer to implementation method 3.11.4.4 (f)
A4	Development of a peat management strategy	Develop an approach to manage drainage schemes where there is a balance between reducing peat subsidence (as in section 14.5 of the Regional Policy Statement) and maintaining production. This is relevant to region wide drainage scheme management on peat.	Undrained peat soil wetlands represent unique ecosystems of considerable value. Whilst degraded from their original condition these drained peat soils contribute	3	

Action no.	Action	Key components / comments	Rationale/drivers/key issues	Strategic aim link	Healthy Rivers applicable ¹
		<p>Understanding peat depth and subsidence rates helps future planning and understanding the long-term consequences of subsidence.</p> <p>Part of this action is a starting point to identify status/current condition/priorities that could inform the regional plan review or actions within the catchment.</p>	<p>considerable economic value to our region. Ongoing subsidence has the potential to create a number of drainage and land management issues, as well as contributing to greenhouse gas emissions. The full impact of the consequences of peat subsidence are unknown and there is limited information on appropriate strategies to reduce the subsidence of peat soils whilst maintaining their productive capacity. Information on to the loss of contaminants from drained peat soils under productive land uses is also poor.</p>		
A5	Fish passage strategy, trials and monitoring	<p>The three year 'Fish passage strategy' work plan is being considered in the Proposed 2018-2028 Waikato Regional Council Long Term Plan, with 50% funding from the regional council's investment fund and half to be met by partners. A work plan to assess existing pump stations and fish barriers within the region and to prioritise where fish passage would assist tuna and native fish passage with consideration of any impacts on the passage of pest fish species.</p> <p>The work includes capital investment to trial and monitor technologies locally. This would culminate in a strategy that would inform the Waikato Regional Council 2021-2031 Long Term Plan.</p> <p>The first 'fish friendly pump' was installed at Orchard Road in 2018 and monitoring is underway. Mugeridge's identified its preferred pump as a fish friendly pump and construction is scheduled to commence in 2018/19.</p>	Environmental/community/cultural/economic	4 & 5	No
A6	Overarching CMP Implementation Strategy	<p>Develop an implementation strategy for the CMP which is to include key performance indicators, capability assessment and processes to support the implementing of all actions as prioritised. Strategy to include consideration of funding opportunities. Strategy to include ensuring "good science" informs decisions and knowledge is stored appropriately and shared as required from all sources. Key elements of strategy include:</p> <ul style="list-style-type: none"> o Prioritise actions and focus on the most important catchment issues/sites. This prioritisation will be based on a prioritisation matrix as detailed within Section 2.0 of this Part 2 CMP; 	<p>This specific action will ensure that the prioritised CMP actions as a whole are implemented accordingly and in an effective and efficient manner involving all necessary collaborative partners.</p>	1 & 2	Refer to implementation method 3.11.4.4 (b)

Action no.	Action	Key components / comments	Rationale/drivers/key issues	Strategic aim link	Healthy Rivers applicable ¹
		<ul style="list-style-type: none"> ○ Create a monitoring process with a clear link to Section 7 Part 1 of this CMP; ○ Outline key actions to implement (could be multi-party/ wider than WRC); ○ Include communications plan (to all key partners); and ○ Consider funding sources. 			
A7	Create opportunities for the community to access and connect with Lake Waikare and Whangamarino Wetland	This is yet to be developed and could include consideration of opportunities for the community to connect with lakes and the wetland, such as walking/cycle tracks, provision of access and educational areas.	<p>There is an interest from the community in interacting with the lake and wetland, through both passive and action recreation.</p> <p>WRC Strategic Direction 2016-2019), identifies that there is an increased benefit from the use and protection of our amenity and recreational features and values and enabling interaction between the community and the wetland and lake to provide for a connection for recreational purposes.</p>	1,2 and 5	No

2.2 Technical projects and processes

There are a number of key technical projects and processes which are either in progress, or could be undertaken in the future; many of which could be undertaken in conjunction with each other. These technical projects and processes may also inform the catchment wide strategies and “on the ground” implementation actions identified; therefore, careful consideration regarding the timing and sequence of the implementation of these technical projects and processes is recommended.

Key for action status:



Commenced Action



New Action



Waikato River Authority co-funded project that is underway and will/anticipated to continue – Ongoing Action

Action no.	Action	Key components / comments	Rationale/drivers/key issues	Strategic aim link	Healthy Rivers Applicable ²
A8	Alternative land use and economic analysis within the catchment.	The economic analysis of alternative land uses can inform landowners in their decision-making. It could also identify potential land use changes that align with other catchment objectives. (Note that a similar type study was undertaken within the Upper Waipa catchment "Investment approaches to land use change in Upper Waipā River catchment.")	The financial impacts of alternate/complimentary/modified land uses.	5	Not directly but supports other actions identified.
A9	Develop a catchment wide strategy associated with management of sediment, E.coli, nitrogen and phosphorus to provide full understanding of issues and options for addressing any identified concerns.	The strategy needs to address both point source and diffuse contaminant sources, identify the key drivers for these and confirm the best practice approach for addressing any issues or opportunities identified. A direct link to A21 below.	Ensuring the focus of implementation is based on a robust understanding of the issues and opportunities around the key contaminants and the best practice solutions for addressing these.	1, 2, 3, 4 and 5	Direct link to Healthy Rivers. Refer to implementation method 3.11.4.4
A10	Investigate any "off-site" mitigation options (within the catchment) for issues or values which cannot be maintained or enhanced in site.	For example, improving the water quality within the lower reaches of the catchment may be very difficult in some circumstances; therefore, mitigating and/or enhancing water quality within upper reaches or other lakes/wetlands may be a more appropriate use of resources. (Note that priority areas for water quality improvement have been identified in the regional prioritisation project and projects that can improve water quality were identified in the Waikato and Waipa Rivers Strategy).	Focus of activities in priority areas helps ensure that gains are maximised and resources are prioritised. Issues identified relate to stream erosion, sediment deposition, urban growth impacts and cultural values	2 & 5	Yes, can be utilised at a sub-catchment level

² based on current proposed Waikato Regional Plan Change 1 – Waikato and Waipa River Catchments

A11	Undertake a review of existing water take resource consents, and current applications.	<p>Determine the current water allocation status across the catchment, and any significant pressures on water allocation and resources (Waikato Regional Council Resource Use Directorate/Science and Strategy Directorate).</p> <p>This action is underway by the Resource Use Directorate as part of business as usual and as part of promulgating Plan Change 6 and registering existing water takes. This work can be a starting point identify status/current condition/priorities.</p> <p>A work programme around water availability and tools is contemplated under the Waikato Regional Council Water Strategy.</p>	Enables current water use allocation and pressures to be identified which is a key starting point. Will help address other issues identified and provide part of other actions	2	No
A12	Investigate the merits for Lake Waikare to be used as a water storage facility for irrigation and other water uses.	<p>Determine the current status of water demand and irrigation proposals and potential future proposals for Lake Waikare as a water reservoir.</p> <p>As part of this, develop a discussion paper canvass the interest of local landowners, downstream horticulture and other water users, and Watercare. Subsequently develop an overall WRC position (which accounts for environmental, statutory and legal obligations) to form a current "Waikato Regional Council Position on Lake Waikare as a Water Reservoir".</p>	As part of any future water allocation from Lake Waikare the shallow bathymetry of Lake Waikare and the resuspension of sediment are identified issues which also need to be placed in the context of the flood control scheme, environmental considerations and cultural values.	2 & 5	No, but resulting output of irrigation would need to consider impacts (intensification & nitrogen leaching). Note, no increase in leaching permitted.
A13	Support other initiatives within the catchment seeking water supply security.	<p>There is growing interest in water supply in the Lower Waikato.</p> <p>The catchment provides water/water passes through the catchment that serves locals within the catchment and to downstream farmers, cropping and urban areas (including Auckland).</p> <p>Water is diverted to support maintaining peat near Motukaraka and Whangamarino wetland.</p>	Security of water supply for farming, communities and the environment.	2 & 5	No, but resulting output of irrigation would need to consider impacts (intensification & nitrogen leaching)
A14	Develop an understanding of the catchment ecosystem services potential, along with environmental economic values.	<p>This understanding should be developed in conjunction with the economic analysis of alternative land uses (A8).</p> <p>By developing the understanding of the catchment services potential; this will ensure that any threats to, or opportunities to improve this are prioritised and managed accordingly.</p> <p>(Note that Waikato Regional Council took account of ecosystem services in a review of the economic benefits of the Lower Waikato and Waipa Flood Control Scheme and Waihou-Piako Schemes – presented to the Rivers Managers group in 2018 and building upon an earlier assessment by Tonkin and Taylor completed for the River Manager group).</p>	To assist with understanding any threat to the economic viability of land use including competing catchment values as well as identifying risks from flooding and stream erosion and instability	5	Not directly but supports other actions identified

A15	Flood scheme reviews	<p>Flood scheme reviews are part of business as usual activities for the Waikato Regional Council Integrated Catchment Management Directorate. Within the reviews, ICM assesses current performance of flood assets and scheme versus agreed levels of service with the community. ICM budgets incorporate this type of scheme review.</p> <p>Flood scheme reviews is listed here as a possible action as the scope of the scheme review can be revised if the community expresses interest in reviewing a different level of service or possible a range of scenarios. Additional funding to address the revised scope would need to be secured however.</p> <p>While the scheme reviews have been limited to water quantity (flooding), going forward there may be opportunity to incorporate wider objectives (e.g. fish passage, ecosystem services etc.). Funding of additional objectives would need to be secured.</p> <p>In the 2018/19 financial year, the Motukaraka scheme is scheduled for completion.</p>	<p>Ensure that flood protection meets the agreed levels of service, safety/community/economy.</p> <p>Potential for future schemes to include environmental objectives.</p>	2 & 5	Not directly at this point in time.
A16	Infrastructure sustainability	<p>To investigate Waikato Regional Council's river management flood control schemes and capital works programme such as whether it:</p> <ul style="list-style-type: none"> • is financially affordable in the long term; has a funding model that accurately reflects the incidence of costs and benefits and, if not; • whether contributions from additional funders would be appropriate; and • is it socially, economically and environmentally sustainable <p>The IPENZ Rivers Managers Forum commissioned work to estimate the benefits and costs of flood control schemes within New Zealand Tonkin and Taylor 2017). Waikato Regional Council built upon this work and included a broader basis of benefits and costs (e.g. including ecosystem services) and presented back to the River Managers Forum (2018).</p> <p>Several reports have been produced regarding the increasing costs of renewals and replacing aspect of the flood scheme (Beca 2015; PWC 2018).</p> <p>Council have committed to undertaking an infrastructure sustainability work programme review, over a two year period 2018/19 – 2020/21. This review will take account of current approaches and respond to the changing environment (including climate change), to inform Council's</p>	Environmental/community/cultural/economic	2 & 5	No

		<p>continuous improvement approach to planning for the operation, maintenance and renewal of assets.</p> <p>Waikato Regional Council Infrastructure Strategy (2018 – 2067) and Regional Asset Management Plan (2018).</p>			
A17	<p>Catchment and lake monitoring under the Lake Waikare Northern Operating Control Gate Section 128 review</p>	<p>Catchment and lake monitoring has been undertaken as part of the Lake Waikare s128 consent review, hearing and appeal.</p> <p>Six locations within the catchment have been monitored over 2017-18 for sediment, quality, temperature. It is due for completion at the end of June 2018, with reporting available by September 2018. Waikato Regional Council Science and Strategy/Healthy Rivers implementation may continue some of the sites.</p> <p>One monitoring stations exists within the Pungarehu Canal to measure sediment and quality that discharges via the canal and into the Whangamarino wetland. This location will continue and forms part of the ongoing consent requirements.</p> <p>Lake Waikare sediment concentration with depth – four sampled events (completed; not expected to continue).</p> <p>(Note that there is an existing Waikato Regional Council state of the environmental monitoring buoy in Lake Waikare).</p>	<p>The monitoring enables an updated sediment budget for the sub-catchments entering and exiting Lake Waikare and the Whangamarino, including the sediment discharging via the Pungarehu canal.</p> <p>The monitoring enables an updated understanding of nutrient loads entering and exiting Lake Waikare and the Whangamarino wetland from the sub-catchments.</p>	2	
A18	<p>Identifying interventions to protect and restore the Whangamarino wetland</p> <p>(“Whangamarino wetland WRA project”)</p> <p>Waikato River Authority co-funded project</p> <p>WRC16-017</p>	<p>The wetland is under threat by a variety of activities within the catchment and the Waikato River. Sediment is accumulating in the wetland and adversely impacting it. The magnitude of making improvements in a location subject sedimentation requires significantly more intervention that improving river water quality.</p> <p>This project builds upon the Waikato and Waipa Rivers Strategy and actions identified in this CMP and Healthy Rivers and assesses what the scale of intervention is required and where it should best be targeted. The study involves data capture, modelling, optioneering and development of new project briefs. The output will be incorporated into updated versions of the Waikato and Waipa Rivers Strategy and this CMP. This project is under the banner of the Waikato District Lakes and Freshwater Wetlands Memorandum of Agreement (membership is those with statutory responsibility – Waikato Tainui, Waikato Regional Council, Waikato District Council, Department of Conservation, and Auckland/Waikato Fish & Game).</p>	<p>Environmental/water quality/hydrology/ecosystem/cultural/community</p>	2 & 4	<p>Potentially – Healthy Rivers needs to set targets for the wetland</p>

		The project commenced in 2017 but has been delayed due to high water levels in the wetland and the need to undertake wetland sediment cores. Due to be undertaken over three years.			
A19	Investigating Maanuka-dominated ecosystems to improve water quality. Waikato River Authority co-funded project WRC16-017	ESR led project in partnership with others. Investigating the opportunity for alternative land usage with Maanuka that can provide economic return and potential ecosystem and water quality benefits. Project underway and continuing through 2018/19. Unknown whether there are potential future stages. Existing works underway/complete (as captured in Map 15: Environmental and restoration projects, within CMP Part 1): <ul style="list-style-type: none">Project 28: Manuka Research Project	Environmental/community/cultural/economic	2, 4 & 5	

2.3 “On the ground” implementation

The actions identified as “on the ground” implementation is considered (in most cases) “quick wins”, and actions which are mostly able to commence based on the current knowledge and understanding of the catchment, with little additional strategy or technical information required. A number of these projects have previously been identified and recommended through the Waikato and Waipa River Restoration Strategy.

Key for action status:



Commenced Action



New Action



Identified in Waikato and Waipa River Restoration Strategy – New Action



Waikato River Authority co-funded project that is underway and will/anticipated to continue – Ongoing Action

Action no.	Action	Key components / comments	Rationale/drivers/key issues	Strategic aim link	Healthy Rivers Applicable ³
A20	Development of information sites and pilot sites within the catchment for demonstration, trials and educational purposes.	<p>This is likely to be closely linked to various technical projects and process (e.g. investigating the merits of constructed wetlands and investigating “off-site” mitigation options/sites (A10)).</p> <p>Locating project sites which are publicly visible/accessible will assist with promoting best practice catchment management and may inspire increased uptake in catchment management practices on private properties.</p>	<p>Utilise existing projects and landowners implementing best practice as showcase sites</p> <p>Enable small scale trial of initiatives prior to adoption by wider catchment. Enables stakeholders to visibly see inputs and outputs.</p>	1, 2, 3, 4 & 5	Not prescribed, but a key tool to support
A21	Implementation of basic best practice catchment management works and practices including beyond a soil conservation focus.	<p>There are areas of the catchment which have not yet implemented basic best practice catchment management works (e.g. soil conservation works, fencing and planting/riparian planting programmes). This includes consideration of the key contaminants of sediment, E.coli, nitrogen and phosphorus.</p> <p>Implementing good management practices in high risk/high priority sites in a progressive and holistic manner is a key action.</p> <p>This action links with many of the identified strategies above (e.g. actions A1 – A5).</p> <p>Ongoing and underway (at a lesser scale) as part of catchment new works. Existing works underway (as captured in CMP Projects map within Appendix A of CMP Part 1):</p> <ul style="list-style-type: none"> • Project 15: Riparian management on private land – vicinity of Whangamarino Wetland • Project 16: Fencing and planting of the WRC land adjacent to Pungarehu Canal (true RHS bank) • Project 18: Pungarehu Canal – cont. of Project 16 • Project 23: Middle and Upper Waerenga Catchment (planting, stream stabilisation, water quality, biodiversity works – private) • Project 26: Riparian management on private land - Kopuku Stream, Mangakura Stream, 	<p>Soils conservation works, fencing and riparian planting are some of the current methods being utilised to mitigate erosion and improve water quality, with some work completed already. Actions identified within the action plan will ensure that focus areas for these works are identified and prioritised.</p> <p>In addressing the four contaminants as identified, key tools to be utilised will include Farm Environment Planning and Nutrient Management Planning as a best practice approach.</p>	1, 2, 3, 4 & 5	Yes, contained within Farm Environment Plans (FEPs)

³ based on current proposed Waikato Regional Plan Change 1 – Waikato and Waipa River Catchments

Action no.	Action	Key components / comments	Rationale/drivers/key issues	Strategic aim link	Healthy Rivers Applicable ³
		<ul style="list-style-type: none"> Ruaotehuia Stream and Mangatangi Project 31: Te Onetea Stream riparian enhancement Project 35: Genesis Energy riparian planting project on the Matahuru Stream (Mangapiko Valley Rd and Waiu Rd) Project 36: Matahuru Stream wetland restoration (at entry to Lake Waikare) Project 37: Lake Waikare riparian project (SE shoreline near the Matahuru Stream mouth) Project 38: Matahuru Stream wetland Restoration – Stage 2 of Project 36 Project 39: Matahuru Catchment (planting, stream stabilisation, water quality, biodiversity works – private) Project 40: Riparian management on private land – vicinity of Lake Waikare 			
A22	Increase Eel (tuna) habitat in Lake Waikare.	<p>This action involves the rehabilitation of tuna habitat within Lake Waikare and has been identified in the Waikato River and Waipa River Restoration Strategy.</p> <p>Existing works underway (as captured in CMP Projects map within Appendix A of CMP Part 1):</p> <ul style="list-style-type: none"> Project 24: Lake Waikare Eel Assessment 	Rationale/drivers/key issues identified and prioritised through the Waikato and Waipa River Restoration Strategy. Includes environmental considerations, economic and cultural aspects	2, 4 & 5	Output of implementation method 3.11.4.4
A23	Development of Lake Waikare South Reserve for recreation.	This action involves the development of the 2-hectare Lake Waikare South Reserve on the eastern side of Lake Waikare owned by the Waikato District Council. This action has been identified in the Waikato River and Waipa River Restoration Strategy.	Rationale/drivers/key issues identified and prioritised through the Waikato and Waipa River Restoration Strategy. Includes environmental considerations, economic and cultural aspects	5	No
A24	Biodiversity enhancement of kahikatea remnants, Waerenga.	<p>This action involves the enhancement and protection of kahikatea remnants over 6 hectares at the end of Jefferies Road, Waerenga.</p> <p>This lowland forest fragment has strong connections to waterways and is within the top 30% of sites for biodiversity protection within the Waikato catchment. This action has been identified in the Waikato River and Waipa River Restoration Strategy.</p>	Rationale/drivers/key issues identified and prioritised through the Waikato and Waipa River Restoration Strategy. Includes environmental considerations, economic and cultural aspects	4	No
A25	Biodiversity enhancement of Whangamarino wetland.	This action includes fully fencing the wetland to exclude stock and regenerate areas which were previously grazed pasture with native vegetation. This action has been identified in the Waikato River and Waipa River Restoration Strategy.	Rationale/drivers/key issues identified and prioritised through the Waikato and Waipa River Restoration Strategy. Includes	4	Implementation method 3.11.4.4

Action no.	Action	Key components / comments	Rationale/drivers/key issues	Strategic aim link	Healthy Rivers Applicable ³
			environmental considerations, economic and cultural aspects		
A26	Biodiversity enhancement of Lake Rotokawau.	<p>This lake is within the top 30% of sites for biodiversity protection within the Waikato catchment.</p> <p>This action includes investigating whether this lake can be isolated from farm drains and overland flow sources, which contributes to high inputs of sediment and nutrients. This action has been identified in the Waikato River and Waipa River Restoration Strategy.</p>	Rationale/drivers/key issues identified and prioritised through the Waikato and Waipa River Restoration Strategy. Includes environmental considerations, economic and cultural aspects	4	Implementation method 3.11.4.4
A27	<p>Matahuru catchment hill country and stream bank erosion protection and remediation.</p> <p>WRA-17-006</p>	<p>Streams in the Matahuru catchment are deeply incised with highly erodible banks and are prone to flash flooding. The Matahuru sub-catchment is identified as a significant contributor of sediment into Lake Waikare and Whangamarino wetland. This project is to implement catchment management and soil conservation interventions on nine farms in the upper catchment.</p> <p>Action includes determination of specific contaminant source, and then applying associated treatment / mitigation.</p> <p>This action includes working with landowners to implement comprehensive farm plans involving the management and/or land use change of steep and erosion prone land; allow fencing of existing indigenous vegetation to exclude stock; allow fencing of the stream with one option riparian margin and planting with native or exotic plant species where required. This action has been identified in the Waikato River and Waipa River Restoration Strategy.</p> <p>Soil conservation work has already been undertaken at 9 properties in the Matahuru catchment (WRA 17-006)</p>	Rationale/drivers/key issues identified and prioritised through the Waikato and Waipa River Restoration Strategy. Includes environmental considerations, economic and cultural aspects	2 & 3	Yes, through Farm Enviro Plans (FEPs) and potentially sub catchment scale planning 3.11.4.5
A28	Waerenga catchment hill country and stream bank erosion protection and remediation.	<p>Streams in the Waerenga catchment have highly erodible banks and are prone to flooding.</p> <p>Action includes determination of specific contaminant source, and then applying associated treatment / mitigation.</p> <p>This action includes working with landowners to implement comprehensive farm plans involving the management and/or land use change of steep and</p>	Rationale/drivers/key issues identified and prioritised through the Waikato and Waipa River Restoration Strategy. Includes environmental considerations, economic and cultural aspects	2 & 3	Yes, through Farm Enviro Plans (FEPs) and potentially sub catchment scale planning 3.11.4.5

Action no.	Action	Key components / comments	Rationale/drivers/key issues	Strategic aim link	Healthy Rivers Applicable ³
		erosion prone land; allow fencing of existing indigenous vegetation to exclude stock; allow fencing of the stream with one option riparian margin and planting with native or exotic plant species where required. This action has been identified in the Waikato River and Waipa River Restoration Strategy.			

A29	Northern Mangatangi stream erosion protection and remediation.	Streams in the Mangatangi catchment are deeply incised with highly erodible banks and are prone to flooding. Action includes determination of specific contaminant source, and then applying associated treatment / mitigation. Working with landowners to allow fencing of targeting streams with one option riparian margin and planting with native or exotic plant species where required; allow the inclusion of adjacent seepages and wetlands within fenced margins. This action has been identified in the Waikato River and Waipa River Restoration Strategy.	Rationale/drivers/key issues identified and prioritised through the Waikato and Waipa River Restoration Strategy. Includes environmental considerations, economic and cultural aspects	2 & 3	Yes, through Farm Enviro Plans (FEPs) and potentially sub catchment scale planning 3.11.4.5
A30	Pungarehu Canal stabilisation.	The Pungarehu Canal has areas of current slumping and erosion caused by stream/canal flows, and also cattle damage from the adjacent paddocks. This action involves preparing a stabilisation programme for these identified locations and implementing as required. This action has been previously identified within the s.128 hearing process associated with the Northern Outlet Control Gate (NOCG). Existing planning of works underway (as captured in CMP Projects map within Appendix A of CMP Part 1): • Project 17: Bank stabilisation/erosion protection on Pungarehu Canal	Areas of slumping and erosion have been identified through the S128 consent process. Issues related to downstream sedimentation as a result of the slumping.	2	No
A31	Lake Waikare Northern Foreshore restoration project Waikato River Authority co-funded project WRA-15-004 WRA-16-007	Restoring forest remnants, constructing new ephemeral wetland habitat, and enhancing biodiversity and water quality on the northern margin of Lake Waikare. Works have largely been completed, with the project now in a maintenance phase. There is scope for future expansion of this site. This project is under the banner of the Waikato District Lakes and Freshwater Wetlands Memorandum of Agreement (membership is those with statutory responsibility – Waikato Tainui, Waikato Regional Council, Waikato District Council, Department of Conservation, and Auckland/Waikato Fish & Game). Stage 2 is now complete. Future stages may be contemplated.	Environmental/water quality/ecosystem/cultural/community	2, 4 & 5	Implementation method 3.11.4.4

3 Funding and partnership opportunities

There are numerous funding organisations and opportunities that regularly fund projects likened to those identified in the CMP Action Plan in section 2. Details of funding organisations and opportunities are included in the Waikato and Waipa River Restoration Strategy (Neilson, et al., 2018) as well as the Waikato Regional Council's website. The information from these sources has been summarised below (alphabetically), along with some brief information about their funding criteria and/or the types of projects they fund.

Afforestation Grant Scheme (AGS)

This funding programme is run by the Ministry for the Environment and is designed to help establish 15,000ha of new forest in New Zealand between 2015 and 2020. Up to \$19.5 million is available until 2020 and grants of \$1300 per hectare are available for growers to plant new small to medium-sized forests (5ha-300ha).

Some of the funding criteria are:

- Eligible land must be new forest planting. It must not:
 - be classed as 'forest land' under the Climate Change Response Act 2002 when you apply;
 - have been 'forest land' on 31 December 1989;
 - have been 'forest land' at any time in the five years before you apply.
- Planting must be with a forest species as defined in the Climate Change Response Act 2002. That is a species that is:
 - capable of reaching at least 5m in height at maturity in the place where it is located;
 - not grown or managed primarily for the production of fruit or nut crops.

A number of pine and mānuka plantings in the Waikato catchment have received funding through AGS. Download the document titled A Guide to the Afforestation Grants Scheme from the website for more information – www.mpi.govt.nz/funding-and-programmes/forestry/afforestation-grant-scheme.

Ministry for the Environment – Community Environment Fund

The Community Environment Fund (CEF) empowers New Zealanders to take environmental action by funding projects that:

- strengthen environmental partnerships;
- raise environmental awareness;
- encourage participation in environmental initiatives in the community. Some of the projects funded to date have involved pest proof fence construction, protection of rare and endangered freshwater and coastal ecosystems, ecosystem monitoring, weed control, riparian planting and animal pest control.

Funding criteria include:

- The project will contribute to one or more of the following:

- strengthening partnerships;
- raising environmental awareness;
- encouraging participation in environmental initiatives in the community.
- The project is for a discrete time frame of up to three years. After this time, the project objectives will have been achieved and, where appropriate, the initiative will have become self-funding.
- The applicant is a legal entity.
- The application is seeking between \$10,000 and \$300,000 (excluding GST) from the Community Environment Fund.

For further information visit the fund website, www.mfe.govt.nz/more/funding/community-environment-fund.

Ministry for the Environment – Freshwater Improvement Fund

This national fund is for projects which improve the management of New Zealand's lakes, rivers, streams, groundwater and wetlands. The aim is to fund projects that will make the biggest difference with the available funding. The fund is therefore focusing on waterbodies in vulnerable catchments that are showing signs of stress but have not yet reached a 'tipping point'. \$100 million is available over 10 years through a contestable funding round. The frequency of funding rounds is yet to be determined. However, \$44 million was allocated in year 1 (2017).

Some of the funding criteria:

- The project must contribute to improving the management of New Zealand's freshwater bodies.
- The project must meet one or more of the following:
- achieve demonstrable co-benefits such as:
 - improved fresh, estuarine or marine water quality or quantity
 - increased biodiversity
 - habitat protection
 - soil conservation
 - improved community outcomes such as to recreational opportunity or mahinga kai
 - reduction to current or future impacts of climate change - reduced pressure on urban or rural infrastructure
 - increase iwi/hapū, community, local government or industry capability and capacity in relation to freshwater management
 - establish or enhance collaborative management of fresh water - increase the application of mātauranga Māori in freshwater management
 - include an applied research component that contributes to improved understanding of the impacts of freshwater interventions and their outcomes.
- The minimum request for funding is \$200,000 (excluding GST).
- The fund will cover a maximum of 50 per cent of the total project cost.
- The project will be funded for a maximum period of up to five years after which the project objectives will have been achieved or the project will be self-funding.
- The project must achieve benefits that would not otherwise be realised without the fund or are not more appropriately funded through other sources.

- The effectiveness of the project and its outcomes will be monitored, evaluated and reported.
- An appropriate governance structure in place (or one will be established as part of the project).
- The applicant must be a legal entity.

For further information visit the fund website, www.mfe.govt.nz/more/funding/freshwater-improvement-fund.

Ngā Whenua Rāhui

This national fund supports the protection of indigenous ecosystems on Māori-owned land while honouring the rights guaranteed to landowners under Te Tiriti o Waitangi. It provides protection for Māori landowners through the use of 25-year renewable kawenata (covenants). It also provides significant support for the landowners, including pest control programmes, monitoring and consequent operational support.

Māori land authorities such as trusts and incorporations, organisations representative of whānau, hapū or iwi, and Māori owners of general land can apply.

Full Ngā Whenua Rāhui Fund criteria is outlined in the application pack, which can be found on the website www.doc.govt.nz/ngawhenuarahui.

Queen Elizabeth II National Trust

Queen Elizabeth II National Trust (QEII Trust) was set up in 1977 to “encourage and promote the provision, protection, preservation and enhancement of open space”.

QEII Trust helps private landowners in New Zealand permanently protect special natural and cultural features on their land with open space covenants. The trust can contribute to fencing costs and covers the cost associated with covenanting a site (e.g. surveying and legal fees).

To obtain QEII support you must be wanting to secure long-term protection of natural and cultural features on private land with a covenant. For more information visit www.openspace.org.nz.

Trust Waikato

Trust Waikato provides donations to not-for-profit community groups and projects that improve the wellbeing of Waikato communities. The types of groups and projects supported is broad, including social services, education, sport, recreation, youth, art, culture, history and the environment. Trust Waikato is particularly interested in projects that target communities with the highest need. The trust awards around \$10 million per annum.

Examples of projects funded in the past include community facilities, walkways, Hamilton Gardens development and educational projects.

Visit the website for detailed information on funding criteria – www.trustwaikato.co.nz.

Waikato Catchment Ecological Enhancement Trust (WCEET)

The Waikato Catchment Ecological Enhancement Trust was established to foster and enhance the sustainable management of ecological resources in the Lake Taupō and Waikato River catchments. Funding awarded varies each year but is generally around half a million dollars.

Examples of projects that have been funded in the past include weed removal, wetland and lake restoration, predator control, wetland creation, planting and restoration.

For more information about the key funding criteria visit the trust's website at www.wceet.org.nz.

Waikato Raupatu River Trust

At times, iwi authorities will have funding available to support environmental initiatives in their rohe. Iwi groups looking to undertake works should contact their iwi authority to see if funding and/or support is available.

Waikato Regional Council – Environmental Initiatives Fund (EIF)

The Environmental Initiatives fund provides one-off grants up to \$40,000 for up to three years, to projects which directly enhance and/or benefit the environment or provide environmental education.

Projects which may be funded include:

- Local government restoration projects;
- Practical environmental initiatives that involve community participation;
- Educational or promotional activities that raise awareness of environmental issues.

Applications are assessed by Waikato Regional Council's staff according to how well they meet the following criteria:

- Fit with Council's regional outcomes and policies – how the project contributes to Council's LTP outcomes and resource management policies.
- Environmental enhancement – how the project will directly promote, enhance or protect the Waikato region's environment
- Community participation & awareness – how the project involves iwi Maaori, the wider community and increases public awareness of environmental issues.
- Innovation/uniqueness – how unique or special is the project?
- Collaboration and partnership – whether the applicants have explored and developed any opportunities for collaboration and partnership with others resulting in contributory funding from other parties.
- Applicant contribution – whether the applicant is actively involved in the project and making a contribution in the form of materials, labour, advisory role, education or financial contribution.
- Viability – the likelihood of the project's success and the applicant's capability to deliver the outcomes of the project. Desirable attributes include a robust project plan, a project budget providing visibility of all funding sources for the project and a clear method for monitoring the success of the project.
- Value to Mana Whenua – how the project involves iwi Maaori including their cultural values, interests and associations, the effect on Maaori historic heritage or the relationship of Maaori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga including fauna and flora.

Contact Waikato Regional Council for further information on 0800 800 401 or visit <https://www.waikatoregion.govt.nz/community/whats-happening/funding-and-scholarships/environmental-initiatives-fund>.

Waikato Regional Council – Integrated Catchment Directorate

The Integrated Catchment Management (ICM) directorate undertakes catchment management, which includes land management, biosecurity and biodiversity projects.

Funding is often available for various aspects associated with catchment management, including fencing, planting and pest control. They are able to fund up to 35 per cent of the project costs for work in priority catchments.

Contact a Waikato Regional Council catchment management officer for further information on 0800 800 401 or visit www.waikatoregion.govt.nz/services/regional-services/river-and-catchment-management.

Waikato Regional Council – Natural Heritage Fund

This regional fund contributes to ecosystem restoration projects that aim to achieve “landscape scale” outcomes. The fund aims to protect and manage, in perpetuity, special places of ecological significance. The amount of funding available annually is expected to be in the range of \$40,000 to \$300,000.

Key priorities include the preservation of access to waterways and the coast, as well as protection of biodiversity, heritage sites and landscapes of significance to the community. To date, the Natural Heritage Fund has been used for a wide range of projects, including Maungatautari Ecological Island Trust, Waipā peat lake reserves and the purchase of the Ed Hillary Hope Reserve.

More information can be found at www.waikatoregion.govt.nz/community/whats-happening/funding-and-scholarships/natural-heritage-fund.

Waikato Regional Council – Small Scale Community Initiatives Fund (SSCIF)

The Small Scale Community Initiatives Fund supports volunteer community groups and individual landowners undertaking ecological restoration through animal and plant pest control. The amount of funding available annually is \$150,000 with individual projects eligible for up to \$5,000.

Applications are assessed by a panel skilled in the area of pest control and ecological restoration, according to how well they meet the following criteria:

- Environmental enhancement – how the project will directly promote, enhance or protect the Waikato region’s environment, with specific reference to ecological and/or biodiversity outcomes.
- A well-developed project plan including measurable outcomes (e.g. a reduction in the rat population measured using tracking cards), a detailed budget and map of the project location/area.
- Viability (the likelihood of the project’s success) – are the goals clear and will methods proposed achieve the goals in a cost effective way?

- Community participation & awareness – does the project involve neighbouring land owners (scale) and/or the wider community and increase public awareness of biodiversity issues?

Contact Waikato Regional Council for further information on 0800 800 401 or visit www.waikatoregion.govt.nz/community/whats-happening/funding-and-scholarships/small-scale-community-initiatives-fund.

Waikato Regional Council – Enviroschools fund

The fund provides one-off grants to projects that directly enhance and/or benefit the environment or provide environmental education. Up to \$25,000 annually can be applied for.

This fund is available to all Enviroschools within the Waikato region that are actively involved in the programme and receive ongoing support from a facilitator. Applications will be considered individually on their merit and shared equitably across the region. Previous funding received from Waikato Regional Council will influence the outcome.

Projects must be in keeping with council's mission, goals and its statutory functions and duties as a regional council. Funding can be provided to specific projects designed to:

- enhance the environment
- promote and/or contribute to sustainable management of the environment
- raise community awareness of environmental issues
- provide environmental education.

Proposals designed to generate personal or commercial profit or compensate individuals are not eligible for funding.

Visit the website for detailed information on funding criteria – <https://www.waikatoregion.govt.nz/community/whats-happening/funding-and-scholarships/enviroschools-grant-fund/>

Waikato River Clean-up Trust

The Waikato River Clean-up Trust (WRCuT) provides funding for projects that improve the health and wellbeing of the Waikato and Waipā rivers and those who work towards the restoration and protection of the health and wellbeing of the rivers for present and future generations. The funding available is up to \$7 million per year.

Each year, the trust releases an annual funding strategy that outlines funding priorities for that year. Examples of projects that have been funded in the past include (but are not limited to) riparian fencing and planting, tuna restoration, lake and wetland restoration, protection and restoration of forest remnants, retirement and planting of erosion prone areas, restoration of cultural sites of significance, iPOU, whitebait spawning restoration, enhancing river and lake access, and iwi capacity building.

Some of the key funding criteria are:

- WRCuT must not fund a project or part of a project that another agency would fund or be likely to fund if the trust did not exist.
- There will be contestability in the allocation of funding.

- There will be a preference for funding practical projects rather than research. In allocating funding, adequate regard must be given to the Vision & Strategy, the scoping study, other relevant research, and furthering iwi environmental plans.
- Projects that have matched or supplementary funding will be given a priority (50 per cent co-funding is desirable).

For further information and to view a copy of the funding strategy on the Waikato River Authority website, go to www.waikatoriver.org.nz.

Ministry for Primary Industries (MPI) – Hill Country Erosion Programmes

The HCE Programme is a partnership between MPI, regional councils, and landowners that aims to:

- plan for and treat erosion-prone land
- put sustainable management practices in place

The HCE Programme uses a total catchment management approach to reduce erosion. This requires all landowners and community members to get involved in identifying issues and creating solutions in their catchments. Reducing erosion in the upper areas of a catchment costs less than the cost of flooding and flood-control structures in the lower areas.

The HCE Programme is open to all regional councils and unitary authorities. For landowners, we recommend you make contact with your council's land manager to work directly with them.

The Hill Country Erosion Programme (HCE) usually runs a funding round once every 4 years. In 2018, due to an increase in funding the Ministry for Primary Industries (MPI) is:

- running 2 separate funding rounds
- adding alpine and coastal erosion areas to fund eligibility
- removing the 5 hectare limit on land that can be treated.

HCE Boost – a one-off opportunity to access funds for projects to be completed by end June 2019.

- Applications open 1 June 2018
- Applications close at 5pm on 15 June 2018
- Funds available: \$1.8 million

HCE Standard – the 4-yearly funding round.

- Applications open 1 October 2018
- Applications close at 5pm on 31 October 2018
- Funds available: \$34 million over 4 years.

The HCE Programme will support proposals where the main treatment is tree planting, including appropriate species for natural vegetative cover.

For further information see the MPI website or email funding@mpi.govt.nz

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