

Lake Rototuna and Lake Rotoroa (Kaweka Lakes)

Summary of Values

**For Proposed Plan Change 7: Hawke's Bay
Regional Resource Management Plan
(Outstanding Water Bodies Plan Change)**

Lake Rototuna and Lake Rotoroa (Kaweka Lakes) - Summary of Values

For Proposed Plan Change 7: Hawke's Bay Regional Resource Management Plan (Outstanding Water Bodies Plan Change)

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Author:
Belinda Harper, Senior Planner

Reviewed by:
Gavin Ide, Principal Advisor Strategic Planning

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Purpose of Report

1. This report is a compilation of information previously documented on the values associated with Lake Rototuna and Lake Rotoroa (Kaweka Lakes) during preparation of Proposed Plan Change 7 prior to its notification on 31 August 2019. It is one of a series of similar reports compiled for each of the respective proposed outstanding water bodies (OWB) identified in Plan Change 7.
2. The approach used by Hawke's Bay Regional Council to identify OWB in Hawke's Bay followed a process that began with a high level review documenting the values associated with 130 water bodies across the region. A short explanation is provided at the beginning of each section which discusses the relevant phase and whether Lakes Rototuna and Rotoroa were considered during that part of the process.
3. Not all OWB identified in Proposed Plan Change 7 were considered during each phase of the process. For clarity, an index table (Table 1) has been included in this report which sets out the relevant phases, report names, values and page numbers for Lake Rototuna and Lake Rotoroa.
4. No new research or further information was commissioned for the purposes of compiling this report.
5. For further information on the Outstanding Water Body Identification Methodology and each of these phases, see the Plan Change 7 Section 32 Evaluation Report¹.

6. **Table 1: Lake Rototuna and Lake Rotoroa index**

Phase	Included (yes/no)	Report name /date	Page numbers in associated report
High Level Review (Phase 1 & Phase 2)	Yes	Summary of Cultural Values Associated with Water Bodies in Hawke's Bay (March 2018)	42
		Summary of the Recreation, Landscape and Ecology Values Associated with Water Bodies in Hawke's Bay (March 2018)	8
Secondary Assessments (Phase 3)	No	N/A	N/A
Local Expert Panel (Phase 4)	Yes	Outstanding Water Bodies in Hawke's Bay - Report of the Expert Panel (April 2019)	52 - 54
Final Evaluation (Phase 5)	Yes	Outstanding Water Bodies Plan Change - selecting a list of outstanding water bodies in Hawke's Bay (May 2019)	20, 24, 31, 36, 40, 43, 49, 52, 59, 63, 94, 107

Plan Change 7 Overview

7. Hawke's Bay Regional Council has prepared an amendment to the Hawke's Bay Regional Resource Management Plan (RRMP) to include a list of the region's outstanding water bodies, together with a framework which prescribes a high level of protection for these water bodies in future plan making. That change to the RRMP is referred to as 'Proposed Plan Change 7' or the 'Outstanding Water Bodies Plan Change.'
8. The water bodies identified in the Outstanding Water Bodies Plan Change have been proposed as the 'best of the best' within the region, featuring an exceptional cultural, spiritual, recreation, natural character, landscape, geology, or ecology value which is remarkable in Hawke's Bay.
9. Since commencing this OWB plan change project in early 2017, a significant amount of work has been undertaken to build a clearer picture of water bodies within the region and their potential for being classed as outstanding.
10. The Outstanding Water Bodies Plan Change amends the RPS to reflect NPSFM provisions which require the protection of the significant values of outstanding water bodies. This special protection does not lessen the importance of, or value associated with other water bodies, which are managed through other parts of the Regional Resource Management Plan or Council work programme.
11. Further information about the background and purpose of proposed Plan Change 7 is online at www.hbrc.govt.nz (search #owb).

¹ <https://www.hbrc.govt.nz/assets/Document-Library/Outstanding-Water-Bodies/1.-Other-supporting-information/Section-32-Evaluation-Report.pdf>

Phase One & Phase Two: High Level Review & Summary of Values

12. In June 2017, the Council embarked on a high level review documenting the cultural, spiritual, recreation, landscape, geological, natural character and ecology values associated with 130 water bodies across the region.
13. Phase 1 involved a thorough review of over ninety documents being completed. Those documents included Deeds of Treaty Settlements, statutory acknowledgements for Treaty settlements, customary uses reports, Waitangi Tribunal reports, and other documents produced in a national and regional context between 1979 and 2018.
14. This work built a clear picture of values associated with a wide range of water bodies across the region and their potential for being classified as outstanding, prior to short listing. This work culminated in a literature review with the following two tables summarising key values associated with 130 of the region's water bodies:
 - Table C1: Cultural Values Table – Summary of Cultural Values Associated with Water Bodies in Hawke's Bay.
 - Table R2: Recreation, landscape, Ecology Values Table – Summary of the Recreation, Landscape and Ecology Values Associated with Water Bodies in Hawke's Bay
15. Table C1 included all water bodies identified by name in reviewed documents, with a high level summary of the associated 'cultural and spiritual values'. This work was sent out to all Treaty settlement entities in Hawke's Bay in December 2017 for input prior to completion.
16. Table R2 included all water bodies identified by name in reviewed documents, with a high level summary of the associated recreation, landscape, geology and ecology values, and ratings assigned in this document.
17. Appendix 1 sets out the relevant extracts from Tables C1 and R2 for Lake Rototuna and Lake Rotoroa.

Phase Three: Refine List & Secondary Assessments

18. In 2018, the high level review findings for 130 water bodies, and their associated values, were reported to the Council's Regional Planning Committee (RPC). The RPC selected a list of 22 candidate OWB to proceed forward a more detailed secondary assessment to see if any contained values that were clearly superior to other water bodies in Hawke's Bay.
19. Lake Rototuna and Lake Rotoroa were not selected as a candidate OWB as such, a secondary assessment was not carried out.

Phase Four: Engagement & Local Expert Panel Process

20. Phase 4 involved wider input from the public, iwi authorities, key stakeholders and territorial local authorities. Feedback from this process featured requests for an additional 20 water bodies to be identified as OWB.
21. In December 2018, Council staff contracted a local expert panel to evaluate, categorise and identify outstanding characteristics, for all value sets, from the list of 22 candidate OWB and the additional 20 water bodies put forward during engagement.
22. The local expert panel was appointed via nominations by key stakeholders, iwi authorities and city and district councils, and comprised six members² with good knowledge of the Hawke's Bay region.
23. The recommendations made by the panel were based on existing information, their local knowledge, and a set of assessment criteria they developed at their first meeting. The assessment criteria used by the panel to identify outstanding features is set out at the beginning of each subsection for each value set.
24. The expert panel found Lake Rototuna and Lake Rotoroa to have outstanding ecology, landscape and natural character. Their findings are set out in Appendix 2.

² Morry Black (Mauri Protection Agency), Matt Brady (DOC), John Cheyne (Te Taiao Environment), Andrew Curtis (Water Strategies Limited), Bernie Kelly (kayaking rep), Tom Winlove (Fish & Game Hawke's Bay)

Phase Five: Final Evaluation

25. Phase Five saw a final evaluation carried out to assist the Council's Regional Planning Committee to select a list of outstanding water bodies in Hawke's Bay, for inclusion in Proposed Plan Change 7.
26. This work summarised the key values of 42 water bodies nominated during Phases 3 and 4, and informed by
 - The secondary assessments
 - local expert panel findings
 - the values summary reports, and
 - stakeholder engagement.
27. The summary was presented by value-type, based on the work to date and in a format consistent with the direction given by Council.
28. Appendix 3 sets out the relevant extracts from the final evaluation for Lake Rototuna and Lake Rotoroa.

Appendix 1: Tables C1 and R2 - Lake Rototuna and Lake Rotoroa (Kaweka Lakes)

Note: Appendix 1 contains extracts only - for further information please refer to the full reports.



Summary of recreation, landscape and ecology values associated with water bodies in Hawke's Bay

HBRC Report No. SD18-02
Plan Number 4979

Strategic Development Group

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Summary of recreation, landscape and ecology values associated with water bodies in Hawke's Bay

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14 March 2018

Prepared By:
Belinda Harper, Senior Planner

Strategic Development Group

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Waterbody / Region / Catchment	Treaty settlement entity group(s) with linkages back to waterbody	Commentary		Key values
Kaweka Lakes Hawke's Bay Ngaruroro TANK		64NZR	No	Ecology Recreation (angling)
		RRS	No	
		MAF&F	No	
		W&SR	No	
		LOR&L	Group two: - Gazetted NZ forest service ecological area. Extraordinary pair of lakes botanically – one fluctuating, one at a constant level. - Very rich flora – one of four north island sites for the sedge <i>Carex cirrhosa</i> . - Scenic – almost entire catchment of native vegetation. - Contains brook trout.	
		HTF	No	
		WONI	No	
		RAMSAR	No	
W&WH	N/A			
RIVAS	No			

Appendix 2: Expert Panel Findings - Lake Rototuna and Lake Rotoroa (Kaweka Lakes)

Note: Appendix 2 contains extracts only - for further information please refer to the full report of the expert panel.

Outstanding Water Bodies in Hawke’s Bay: Report of the Expert Panel





159 Dalton Street - Napier 4110
Private Bag 6005 Napier 4142
Telephone (06) 835 9200
Fax (06) 835 3601
Regional Freephone (06) 0800 108 838

Outstanding Water Bodies in Hawke's Bay Report of the Expert Panel

April 2019
HBRC Report No. SP19-19



Prepared by:

Morry Black, Mauri Protection Agency
Matthew Brady, Department of Conservation
John Cheyne, Wetland Works
Andrew Curtis, Water Strategies Ltd
Bernie Kelly, Hawke's Bay Canoe Club
Tom Winlove, Hawke's Bay Fish and Game Council

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Outcome 2: OWB Assessment Criteria

The Panel considered the criteria for what makes the selected values regionally ‘Outstanding’. The Gisborne District Council OWB criteria provided a useful framework but needed both simplification and some additional criteria.

Both quantitative and qualitative (descriptive) measures were selected and are set out below in Table 4. ‘Outstanding’ values could also be variable, for example, customary values can be dependent on the season or time of year.

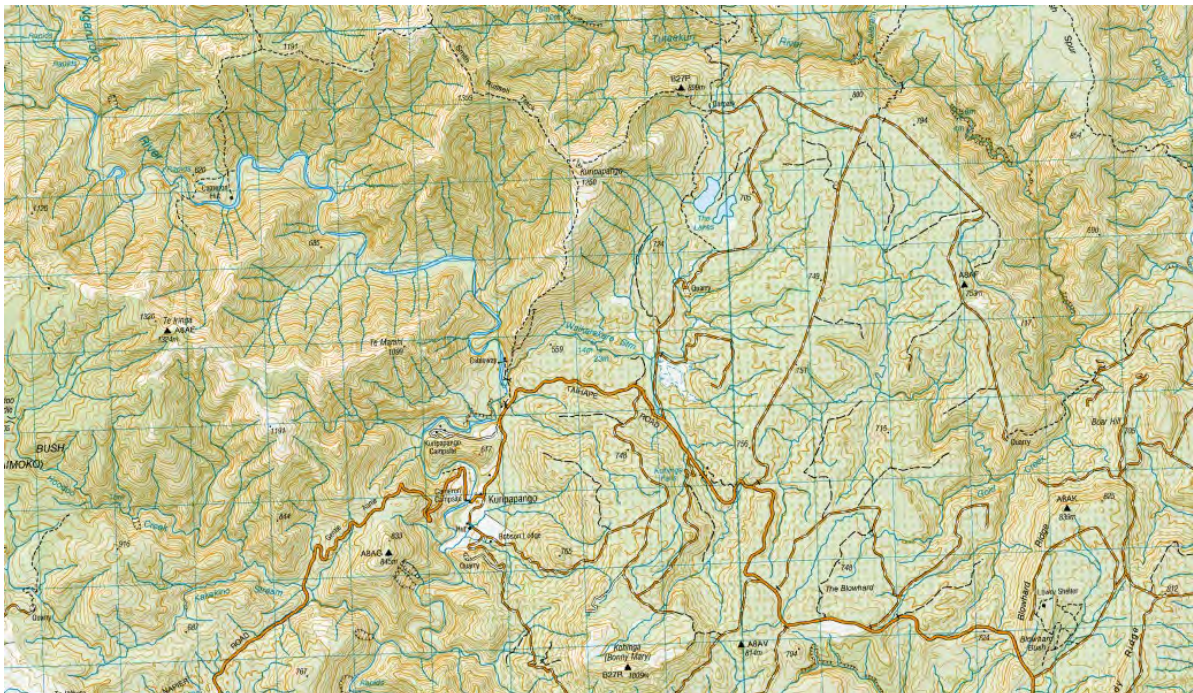
TABLE 4: CRITERIA FOR ASSESSING ‘OUTSTANDING’ VALUES

‘OUTSTANDING’ VALUE	CRITERIA	INDICATOR
Ecology	Threatened Species	4 or more threatened species
	% of Population	<ul style="list-style-type: none"> • >2% of a national population of a native species • >15% of a regional population of a native species
	Ecological Distinctiveness	Presence of a unique or distinctive characteristic/ habitat or species at the regional level
	Ecological Function	Presence of a critical or outstanding: <ul style="list-style-type: none"> • Breeding site • Ecosystem component • Assemblage • Kohanga ika/ nursery • Fish passage/ fish spawning
Landscape	A water body that contains a unique hydrological, geological or culturally significant feature A water body that is widely recognised at the regional level for its scenic values	
Natural Character	A water body that is highly natural with little or no human modification, including to the flow, bed and riparian margins, water quality, flora and fauna, within a largely indigenous landscape	
Amenity/ Recreation	A recreational experience that is exceptional in or on the water An exceptional location for angling or customary food gathering A unique historical or heritage site	
Cultural & Spiritual	Preliminary and high level comments only are provided using the following framework: For understanding and assessing the outstanding values, attributes and uses of water bodies from a cultural and spiritual perspective, the following concepts have been applied:	

	<p><i>Wairuatanga</i></p> <ul style="list-style-type: none"> Mauri Mana Tapu Taonga tuku iho <p><i>Rangatiratanga</i></p> <ul style="list-style-type: none"> Mana whenua – mana moana Kaitiakitanga Mahinga kai (as a place, action or practice) <p><i>Whakapapa</i></p> <ul style="list-style-type: none"> O te whenua O te wai O te tangata Ki uta ki tai <p><i>Matauranga Maori</i></p> <ul style="list-style-type: none"> Tikanga Maori knowledge systems Traditional uses and values Origins of cultural knowledge <p><i>Cultural Natural Character</i></p> <ul style="list-style-type: none"> Spiritual condition Mana o te wai Connectivity between ground and surface water Cleansing properties as water passes through the whenua Spring / aquifer sources – water recharge systems <p>SPECIAL NOTE:</p> <p>Tangata whenua will provide locally relevant assessments through separate input to the process (Refer to Appendix 4: Maori cultural and spiritual values, and see Diagram 1).</p>
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Kaweka Lakes

Lakes Rotoroa and Rototuna



KAWEKA LAKES: DESCRIPTION OF OUTSTANDING VALUES

SUMMARY

TYPE	NAME	OUTSTANDING VALUE				
		ECOLOGY	LANDSCAPE	NATURAL CHARACTER	AMENITY & RECREATION	CULTURAL & SPIRITUAL
Wetland	KAWEKA LAKES					

ECOLOGY

Description	Notes	Reference
<p><i>Threatened Species:</i></p> <p>1 bird species – grey duck</p> <p>3 plant species – <i>amphibromus fluitans</i>, <i>carex cirrhosa</i>, <i>pterostylis micromega</i></p>		<p>Bird list in Appendix 2</p> <p>Clarkson, B & Druce, A 1984</p>
<p><i>Ecological Distinctiveness:</i></p> <p>Population of lake-locked Koaro</p> <p>The lakes and associated wetlands are ecologically distinct in the region</p>		<p>HBRC 2018</p> <p>Clarkson 1984</p>
<p><i>Ecological Function:</i></p> <p>Unmodified ecology – the catchment is almost entirely native and has associated bog, palustrine and riverine wetlands</p> <p>Lakes SPI highest scoring for lakes surveyed in the region</p>		<p>HBRC 2018</p> <p>NIWA LakeSPI</p>

LANDSCAPE

Description	Notes	Reference
Widely recognised for their scenic qualities due to the catchments pristine state		HBRC 2018

NATURAL CHARACTER

Description	Notes	Reference
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Outstanding Water Bodies in Hawke's Bay: Report of the Expert Panel

The lakes are in an unmodified state surrounded by indigenous forest and small wetlands		WCO application 2019 NIWA Lakes SPI
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Appendix 3: Final Evaluation - Lake Rototuna and Lake Rotoroa (Kaweka Lakes)

Note: Appendix 3 contains extracts only - for further information please refer to the full report.



Outstanding Water Bodies Plan Change Selecting a list of outstanding water bodies in Hawke's Bay

HBRC Report Number: SD19-18
Publication Number: 5400

Outstanding Water Bodies Plan Change

Selecting a list of outstanding water bodies in Hawke's Bay

HBRC Report Number: SD19-18
Publication Number: 5400



Prepared by:

Belinda Harper, Senior Planner

Dale Meredith, Senior Planner

Reviewed by:

Ceri Edmonds: Policy and Planning

Dale Meredith: Senior Planner

Tom Skerman: Group Manager Strategic Planning

Ecology values

Wildlife

The Fernbird, NZ pipit and the black shag inhabit the area around Lake Rototuna and Lake Rotoroa.

The local expert panel also noted the grey duck as being present at the two Lakes. However due to insufficient information staff are not recommending grey duck be taken into account in the RPC's final assessment.

The local expert panel found Lake Rototuna and Lake Rotoroa to have outstanding wildlife values, specifically noting the presence of the grey duck at the site. The local expert panel's report is attached in Appendix 6.

Native fish

Lake Rototuna and Lake Rotoroa were formed thousands of years ago by streams being dammed by a large slip from Mount Kuripapango.

Lake Rotoroa has a large population of kōaro which are 'lake-locked' and carry out their entire life cycle in freshwater. DOC has advised that longfin eel are also thought to be present in the catchment of the lakes.

Kōaro and longfin eel are classified as at risk and declining, on the NZTCS.

The local expert panel found Lake Rototuna and Lake Rotoroa to have an outstanding ecological distinctiveness, specifically noting their populations of lake-locked kōaro. Appendix 6 sets out the full findings of the local expert panel.

Native plants

Lake Rototuna and Lake Rotoroa are ecologically and botanically significant because of the large number of plant species and vegetation types in the surrounding area.

Lake Rototuna is currently the best example of a waterbody that still remains in an all-native vegetated state in the region. In 2017, NIWA found Lake Rototuna to have the best composition of submerged aquatic plants in Hawke's Bay.

The Lake has a well-developed native plant community, dominated by three species of native charophyte which forms 100% cover from the lake edge to a depth of around 8.1 m. There are several endangered and threatened plant species which grow above the lake littoral zone, including:

- The nationally endangered *pterostylis micromega* (a swamp greenhood orchid),
- The nationally vulnerable *Amphibromus fluitans* (water brome), *Carex cirrhosa*, and *Spiranthes novae-zelandiae*,
- The at risk *Deschampsia caespitosa*, and *Lobeliaionantha*,
- One data deficient species (*Ranunculus macropus*) (swamp buttercup).

Lake Rotoroa is thought to contain similar submerged community to Lake Rototuna, with the addition of the endemic deep water wetland sedge, *Eleocharis sphacelata*, which is a regionally threatened species.

The local expert panel found Lake Rototuna and Lake Rotoroa to have outstanding native plant values and an outstanding ecological distinctiveness, specifically noting the 3 plant species *Amphibromus fluitans*, *Carex cirrhosa* and *pterostylis micromega*. Appendix 6 sets out the full findings of the local expert panel.

Natural character

Lake Rototuna and Lake Rotoroa are situated in the Kaweka Forest Park, surrounded by indigenous vegetation, with no sign of human modifications. The lakes are ecologically significant because of the large number of plant species and vegetation types in the surrounding area.

In 2017, Lake Rototuna was categorised in excellent condition with a LakeSPI Index of 79% by NIWA. The high LakeSPI Index generated for this lake reflected the presence of a well-developed native plant community and the absence of any invasive weed species.

The local expert panel found Lake Rototuna and Lake Rotoroa to have an outstanding natural character values, specifically noting the lakes are in an unmodified state surrounded by indigenous forest and small wetlands.

Landscape / geological features

Lake Rototuna and Lake Rotoroa are located in the Kaweka Forest Park, surrounding by indigenous native forest.

Very little information could be found on the landscape and geological values associated with the two lakes, and they do not feature on the New Zealand Geopreservation Inventory.

The local expert panel found Lake Rototuna and Lake Rotoroa to have outstanding landscape values, specifically noting they are widely recognised for their scenic qualities due to the pristine state of the greater catchment area. Appendix 6 sets out the full findings of the local expert panel.

Cultural and Spiritual values

Lake Rotoroa and Lake Rototuna are located in the headwaters of the Ngaruroro catchment.

The local expert panel found that further cultural assessment was needed for Lake Rotoroa and Lake Rototuna.

At the time of writing, iwi authorities had not provided any comment specific to Lake Rotoroa and Lake Rototuna.