



Ecosystem Mauri (Environmental) Indicator Descriptions - Kaitiakitanga

Ecosystem Mauri 1	Lake Water Quality - Total Nitrate concentrations in Water Column (Intensification)
Ecosystem Mauri 2	Non-point source contamination - Removal or planted riparian buffers with stock exclusion
Ecosystem Mauri 3	Ground water quality - Nitrate & Phosphosphate discharges to ground water
Ecosystem Mauri 4	Soil Resilience and Assimilative Capacity - Treated effluent disposal long term effects
Ecosystem Mauri 5	Wetlands - quality and quantity as habitat for Threatened Species and reproductive capacity
Ecosystem Mauri 6	Habitat Integrity - Control of Algal bloom, Noxious Weeds, Riparian Margins
Ecosystem Mauri 7	Catchment Resilience - Removal of nutrient sources, Lake level range, climate change
Ecosystem Mauri 8	Lake Water Quality - Total Phosphorous concentrations in Lake Sediments

Pikiao Mauri (Cultural) Indicator Descriptions - Tino Rangatiratanga

Pikiao Mauri 1	Kawa - Respects Tapu associated with specific sites (honouring past)
Pikiao Mauri 2	Tikanga - Maintains relationships with other Iwi (managing present relationships)
Pikiao Mauri 3	Whakatipuranga - Manage the Mauri of the Lakes to facilitate future needs/practices
Pikiao Mauri 4	Mahingakai (Manākitanga)- suitability of taonga species for cultural harvest
Pikiao Mauri 5	Treaty Principles- Land for land exchanges facilitate treated effluent disposal arrangements
Pikiao Mauri 6	Wāhi tapu- capacity of places to support traditional practices retaining integrity of purpose
Pikiao Mauri 7	Taonga (Ngae Rauemi)- suitability of resources for extraction, use in traditional applications

Hapori Mauri (Social)

Indicator Descriptions - Manakitanga

Hapori Mauri 1	Lake water quality suitable for potable use (intentional consumption)
Hapori Mauri 2	Lake water quality suitable for safe accidental or emergency consumption
Hapori Mauri 3	Lake water quality suitable for safe swimming and other water contact recreation
Hapori Mauri 4	Lake water quality suitable for safe food gathering
Hapori Mauri 5	Air quality free of odour from wastewater effluent or wastewater treatment processes
Hapori Mauri 6	Financial implications - Cost to be met by each marae / community facility / sports club
Hapori Mauri 7	Affordability - Cost to contributed by low income residents (means tested)

Whanau Mauri (Economic) Indicator Descriptions - Orangatangā

Whanau Mauri 1	Direct Economic Impact - Scheme Affordability (measured against ?)
Whanau Mauri 2	Indirect Economic Impact on Property Values - Potential for site intensification
Whanau Mauri 3	Flow-on Economic Impact - Employment opportunities from construction
Whanau Mauri 4	Long-term Economic Impact - Operating Costs and Rates Revenue Generation
Whanau Mauri 5	Impacts on Average Regional Household Income - rates implications of option
Whanau Mauri 6	Economic Impact of Resource Consent duration and Implications
Whanau Mauri 7	Future liability for scheme replacement or upgrades
Whanau Mauri 8	Land requirements for disposal and availability of suitable land

mauriOmeter Indicator Assessment



Mauri Dimension Rotomā	NOW	SCORE NOW	RDC-1	SCORE RDC-1	RDC-3 & RDC-4	SCORE RDC3 & RDC4	CB6b . CB6c	SCORE CBC	OSET + Onsite	SCORE OSET
Ecosystem Mauri (Environmental) Indicator Descriptions - Kaitiakitanga	0.00	0.00	9.00	1.13	5.00	0.63	3.00	0.38	1.00	0.13
Pikiao Mauri (Cultural) Indicator Descriptions - Tino Rangatiratanga	5.00	0.71	-3.00	-0.43	3.00	0.43	7.00	1.00	3.00	0.43
Hapori Mauri (Social) Indicator Descriptions - Manakitanga	7.00	1.00	7.00	1.00	7.00	1.00	6.00	0.86	4.00	0.57
Whanau Mauri (Economic) Indicator Descriptions - Orangatanga	-2.00	-0.25	-5.00	-0.63	0.00	0.00	1.00	0.13	-6.00	-0.75
OPTION SCORE OVERALL		0.37		0.27		0.51		0.59		0.09
RANK		3		4		2		1		5

Mauri Dimension Rotoiti	NOW	SCORE NOW	RDC-1	SCORE RDC-1	RDC-3 & RDC-4	SCORE RDC3 & RDC4	CB6b . CB6c	SCORE CBC	OSET + Onsite	SCORE OSET
Ecosystem Mauri (Environmental) Indicator Descriptions - Kaitiakitanga	-11.00	-1.38	3.00	0.38	3.00	0.38	0.00	0.00	-4.00	-0.50
Pikiao Mauri (Cultural) Indicator Descriptions - Tino Rangatiratanga	-4.00	-0.57	-3.00	-0.43	1.00	0.14	7.00	1.00	0.00	0.00
Hapori Mauri (Social) Indicator Descriptions - Manakitanga	-5.00	-0.71	2.00	0.29	3.00	0.43	2.00	0.29	-5.00	-0.71
Whanau Mauri (Economic) Indicator Descriptions - Orangatanga	-2.00	-0.25	-7.00	-0.88	-1.00	-0.13	1.00	0.13	-9.00	-1.13
OPTION SCORE OVERALL		-0.73		-0.16		0.21		0.35		-0.58
RANK		5		3		2		1		4

Mauri Dimension Rotomā	Weight	SCORE NOW	Weight	SCORE RDC-1	Weight	SCORE RDC3 & RDC4	Weight	SCORE CBC	Weight	SCORE OSET
Ecosystem Mauri (Environmental) Indicator Descriptions - Kaitiakitanga	0.40	0.00	0.40	1.13	0.40	0.63	0.40	0.38	0.40	0.13
Pikiao Mauri (Cultural) Indicator Descriptions - Tino Rangatiratanga	0.30	0.71	0.30	-0.43	0.30	0.43	0.30	1.00	0.30	0.43
Hapori Mauri (Social) Indicator Descriptions - Manakitanga	0.20	1.00	0.20	1.00	0.20	1.00	0.20	0.86	0.20	0.57
Whanau Mauri (Economic) Indicator Descriptions - Orangatanga	0.10	-0.25	0.10	-0.63	0.10	0.00	0.10	0.13	0.10	-0.75
OPTION WEIGHTED SCORE OVERALL (PIKIAO)		0.39		0.46		0.58		0.64		0.22
RANK		4		3		2		1		5

Mauri Dimension Rotomā	Weight	SCORE NOW	Weight	SCORE RDC-1	Weight	SCORE RDC3 & RDC4	Weight	SCORE CBC	Weight	SCORE OSET
Ecosystem Mauri (Environmental) Indicator Descriptions - Kaitiakitanga	0.30	0.00	0.30	1.13	0.30	0.63	0.30	0.38	0.30	0.13
Pikiao Mauri (Cultural) Indicator Descriptions - Tino Rangatiratanga	0.10	0.71	0.10	-0.43	0.10	0.43	0.10	1.00	0.10	0.43
Hapori Mauri (Social) Indicator Descriptions - Manakitanga	0.30	1.00	0.30	1.00	0.30	1.00	0.30	0.86	0.30	0.57
Whanau Mauri (Economic) Indicator Descriptions - Orangatanga	0.30	-0.25	0.30	-0.63	0.30	0.00	0.30	0.13	0.30	-0.75
OPTION WEIGHTED SCORE OVERALL (OTHER)		0.30		0.41		0.53		0.51		0.03
RANK		4		3		1		2		5

Mauri Dimension Rotoiti	Weight	SCORE NOW	Weight	SCORE RDC-1	Weight	SCORE RDC3 & RDC4	Weight	SCORE CBC	Weight	SCORE OSET
Ecosystem Mauri (Environmental) Indicator Descriptions - Kaitiakitanga	0.40	-1.38	0.40	0.38	0.40	0.38	0.40	0.00	0.40	-0.50
Pikiao Mauri (Cultural) Indicator Descriptions - Tino Rangatiratanga	0.30	-0.57	0.30	-0.43	0.30	0.14	0.30	1.00	0.30	0.00
Hapori Mauri (Social) Indicator Descriptions - Manakitanga	0.20	-0.71	0.20	0.29	0.20	0.43	0.20	0.29	0.20	-0.71
Whanau Mauri (Economic) Indicator Descriptions - Orangatanga	0.10	-0.25	0.10	-0.88	0.10	-0.13	0.10	0.13	0.10	-1.13
OPTION WEIGHTED SCORE OVERALL (PIKIAO)		-0.89		-0.01		0.27		0.37		-0.46
RANK		5		3		2		1		4

Mauri Dimension Rotoiti	Weight	SCORE NOW	Weight	SCORE RDC-1	Weight	SCORE RDC3 & RDC4	Weight	SCORE CBC	Weight	SCORE OSET
Ecosystem Mauri (Environmental) Indicator Descriptions - Kaitiakitanga	0.30	-1.38	0.30	0.38	0.30	0.38	0.30	0.00	0.30	-0.50
Pikiao Mauri (Cultural) Indicator Descriptions - Tino Rangatiratanga	0.10	-0.57	0.10	-0.43	0.10	0.14	0.10	1.00	0.10	0.00
Hapori Mauri (Social) Indicator Descriptions - Manakitanga	0.30	-0.71	0.30	0.29	0.30	0.43	0.30	0.29	0.30	-0.71
Whanau Mauri (Economic) Indicator Descriptions - Orangatanga	0.30	-0.25	0.30	-0.88	0.30	-0.13	0.30	0.13	0.30	-1.13
OPTION WEIGHTED SCORE OVERALL (OTHER)		-0.76		-0.11		0.22		0.22		-0.70
RANK		5		3		1		1		4

Comparison of MauriOmeter & MCA

#	Short List Option	MauriOmeter Overall Score		TAG#2 MCA Overall Score
		Pikiao	Other	
SL1	RDC1 - Piped to Rotorua WWTP	0.46	0.41	2.85
SL2	RDC-3 - A single WWTP and land disposal system in Scheme area RDC-4 - Two separate WWTP and land disposal systems in the scheme area	0.58	0.53	3.58
SL3	CB-6b - Urine separation , individual Biolytix and cluster sub-surface irrigation . CB-6c - DRASTIC - Urine separation, onsite septic tanks and cluster off-site urine storage and land application	0.64	0.51	3.80
SL4	OSET	0.22	0.03	2.30

- Both are tools only and was piloted by TAG for Rotoma only
- The overall MauriOmeter and MCA scores are not comparable (different scale)
- In all cases SL2 and SL3 came out the two more preferred options
- In all cases the OSET options (SL4) were the least preferred
- SL1 came out higher in the MauriOmeter than in the MCA