

Development & Classification of Issues

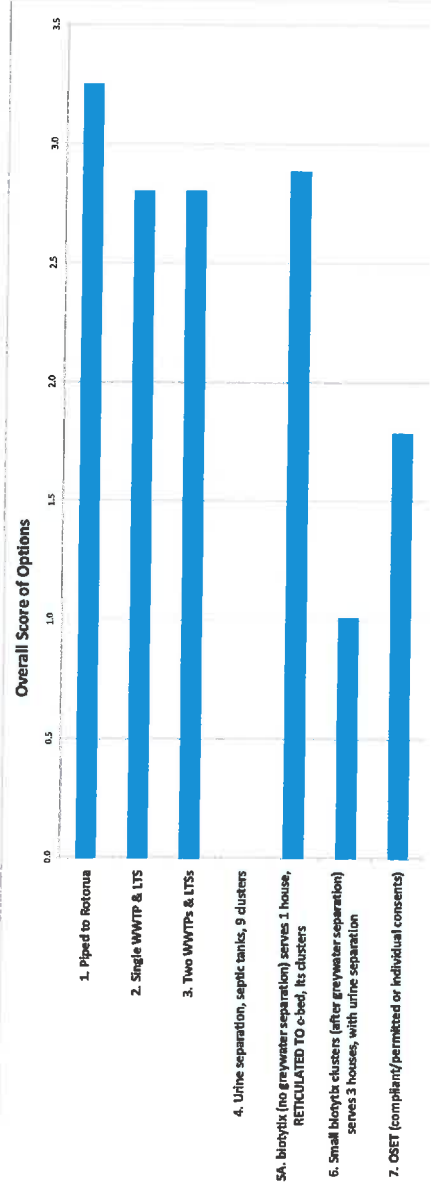
Instructions:

1. Enter goals of project in Analysis Criteria column
2. Enter the description of each goal - the criteria against which you will judge each options ability to meet the goal
3. Select classification of goal - Environmental, Economic, Cultural, Social
4. Select Qualitative or Quantitative for each goal - this is a reference for a later date so you can see how the criteria was judged, for example if the water quality of each option has been quantified they can be ranked
5. Delete text from any unused rows

Ref	Issue	Fundamental criteria used for comparative and	GOALS from Steering Committee & associated considerations	Classification	Qualitative or Quantitative
Goal 1	Lakes Environmental	Extent to which the option reduces sewage-nutrients going to lakes	<ul style="list-style-type: none"> 1. Contributes best to improving the water quality in Lakes Rotoli, Rotochu and Rotoma by reducing such nutrient and contaminant flows from homes and properties as enter into the lakes. 2. Achieve high degree of removal of nutrients from wastewater. 3. Diverting other sewage derived contaminants entering the lakes. 4. Change / disposal of residual tumours (after treatment) into appropriate catchments. 5. Ensure that the option is able to accept treated sewage sustainably over the long term. 6. Address cumulative effects on the environment. 7. Effects of climate change and mitigation against these. 	Environmental	Qualitative
Goal 2	Tangata whenua	Extent to which the option best meets the cultural needs of tangata whenua (for steering group and consultation)	<ul style="list-style-type: none"> 2. Best meets the cultural needs of tangata whenua. 	Cultural	Qualitative
Goal 3	Community Environment	Extent to which the option has acceptable impact of infrastructure and operations on the community environment	<ul style="list-style-type: none"> 3. Achieves community environmental outcomes. 4. Ensures a safe healthy environment for communities and individuals on their properties - (e.g. no flooding from septic tank discharges). 5. Separation distances (NMBY) from sewerage scheme infrastructure. 6. Maintain / enhance amenity value. 7. Odour nuisance and odour management from sewage facilities. 8. Protection and enhancement of lakes water quality and ecology from a recreational and food gathering activities perspective - (no not consider raw nutrient load to the lake which is covered in Lakes Environmental category). 	Environmental	Qualitative
Goal 4	Public Health	Extent to which the option best safeguards public health	<ul style="list-style-type: none"> 4. Best safeguards public health. 9. Provides safe public health and sanitation on individual properties. 10. Meets the approval of the Medical Officer of Health and Area Health Board. 11. Protects the health and safety of the community. 12. Ensures safe water supply, sanitation and food gathering. 13. Odour management to avoid objectionable and/or nuisance odours. 14. Separates people from human waste 	Social	Qualitative
Goal 5	Statutory	Degree of ease in obtaining the Consents and other required approvals/agreements	<ul style="list-style-type: none"> 5. Complies with regulatory requirements national and regional. 6. Alignment with the provisions of the Resource Management Act 1991 and the Resource Management Act 2002. 7. Meets RDC's requirements under the Local Government Act 2002 in terms of public health protection and safe sanitation. 8. Alignment with the purpose of the Local Government Act 2002 in terms of ensuring that the option makes and provision of good quality local infrastructure that is efficient and effective, most cost effective and meet's present and future circumstances. 9. Meets the RDC's Proposed RPS, Regional Plans including OSET and RDC's District Plan and other Plans, Policies and Strategies and (any?) Management Plans. 10. Consentability and obtaining other approvals that maybe required. 	Other	Qualitative
Goal 6	MoH Subsidy	Covered by the economic goal (we're assuming that cost is the driver for this goal)	<ul style="list-style-type: none"> 8. Retains the MoH subsidy if that is appropriate. 9. Will the subsidy be available for the option? 10. Meets the specific requirements of Central Government's Ministry of Health Sanitary Works Subsidy Scheme (SWSS) as to scheme type and scheme procurement procedures. 11. Meets the specific times and other conditions the Minister of Health has set down for in order to retain subsidy. This includes completion by 30/06/22. 12. Socio-economic considerations - property owners / occupants / master / recreational facilities etc* 	Economic	Qualitative
Goal 7	Economic - Rotoma/Rotoli	Extent to which the option is affordable to property owners in Rotoma/Rotoli	<ul style="list-style-type: none"> 7. Meets most cost effective option for local rate payers as well as RDC 13. Meets the Local Government Act 2002 for good - quality local infrastructure that is "most cost effective" for householders and business (note good - quality local infrastructure is efficient and appropriate to present and anticipated future circumstances). 14. "Cost effectiveness" is to consider both capital and on-going operation and maintenance costs, that is lifecycle costs. This encompasses Capital Cost (Capex) and Operating and Maintenance (Opex) cost considerations. 15. Consulting costs. 16. For an RDC Sewerage Scheme(s) equitable and consistent capital changing and annual rates (operating cost) across the entire area served by a Scheme(s) unless special local circumstances require other procedures. 	Economic	Quantitative
Goal 8	Social	Extent to which the option has community support (for Steering Group and consultation)	<ul style="list-style-type: none"> 8. Has community support. 17. Degree of community support for the Proposed Scheme(s) type. 18. Support for the location of the components of the Proposed Scheme - sensitive land use. 19. Community support through the (any) Resource Consents and other approvals processes. 20. Perception of sewerage scheme type. 21. Acceptance / limitations of on-site sewage facilities and ground storage. 22. Socio-economic considerations (overlives with Economic above)* 	Social	Qualitative
Goal 9	Technical	Extent to which the option has proven, resilient, flexible, operatable, compatible technology	<ul style="list-style-type: none"> 9. RDC Scheme options are to use proven, reliable, robust and resilient technology consistent with RDC's wastewater infrastructure requirements (PAG yet to consider) 23. Provision of engineering resilience to natural hazards (landslide, earthquake, flooding etc) and climate change. 24. Proven and reliable technology consistent with RDC's Activity Management and Asset Management provisions. 25. Approach to future capacity, redundancy and possible changing environmental conditions. 26. Number of schemes. 27. Condition of schemes. 28. Availability of suitable skills/knowledge management procedures. 29. Risk identification and appropriate mitigation. 	Other	Qualitative

Score (0-5 with 5 highest) Options Against Criteria ROTOMA

Options	Assessment Criteria										Weighted Score			
	TAG	SC	TAG	Community Environment	TAG	Public Health	SG	X	TAG	SC		TAG	SC	TAG
	Extent to which the option reduces sewage-nutrients going to lakes	Extent to which the option best meets the cultural needs of Tangata Whenua (Group and consultation)	Extent to which the option has an acceptable impact on the community and operations on the community	Extent to which the option best safeguards public health	Degree of difficulty in obtaining the consents and other required approvals	Covered by the economic goal (we're assuming that cost is the driver for this goal)	Economic - assumed subsidies) is affordable to property owners	Extent to which the option has community support (for Steering Group and consultation)	Extent to which the option has proven, resilient, flexible, operable, compatible technology					
1. Piped to Rotorua	4		4	4			0.229	5	0.214	5		3.2	1	
2. Single WWTP & LTS	4		4	4				3		5		2.8	3	
3. Two WWTPs & LTSs	4		4	4				3		5		2.8	3	
4. Urine separation, septic tanks, 9 clusters														
5A. biolytic (no greywater separation) serves 1 house, RETICULATED TO c-bed, 16 clusters	3		3	4				5		4		2.9	2	
6. Small biolytic clusters (after greywater separation) serves 3 houses, with urine separation	2		1	1				1		2		1.0	6	
7. OSET (compliant/permited or individual consents)	2		2	1				4		2		1.8	5	



Appendix C Sustainability Assessment of Rotoiti and Rotomā Sewage Project Solution Options by Technical Advisory Group Tasks 13, 14, 18 & 38, 8 August 2014. Report Prepared for Rotorua District Council. Mahi Maioro Professionals ©2014 mauriOmeter. (MMDMF)

(excerpts from the full Report).

The full Report prepared by Dr Kepa Morgan has been separately distributed by RRSC Chairman, Ian Mclean to RRSC members. In terms of cultural and social considerations the TAG suggests this Report should sit alongside its own (TAG) Report and be a point of reference for tikanga and background context.