

Title: 20-280 Major Project Report - Makauri Aquifer Recharge
Section: Transformation & Relationships
Prepared by: Dr Graeme Card PMP - Programme Manager - Science
Meeting Date: 17 September 2020

Legal: No

Financial: No

Significance: **Low**

Report to OPERATIONS Committee for information

PURPOSE

The purpose of this report is to provide an update on the progress of the Makauri Aquifer Recharge project (MAR) since the last report in August. The update will include year-to-date spend, volumes injected, and progress on subcommittee memberships.

SUMMARY

Injection recommenced on 12 May 2020 and progress was initially hampered by a wetter than average winter. As at 31 August 2020, ~62,000m³ has been injected and is currently on track to match the amount injected in 2017.

Invitations to iwi, growers and Trust Tairāwhiti have been sent to form a subcommittee which will act as an advisory group to the Operations Committee. The inaugural meeting is planned for 1 October 2020.

Independent MAR experts have been approached to carry out a scientific review of all the trial data. They will help inform the discussion around the implementation of a large permanent MAR scheme.

The project is tracking within its budgetary constraints and is predicted to finish below budget. Recent reports from Golder Associates are now on-line, and their assessment is that water quality monitoring has not identified any areas of concern with the current injection trial.

The decisions or matters in this report are of **Low** significance in accordance with the Council's Significance and Engagement Policy.

RECOMMENDATIONS

That the Operations Committee:

- 1. Notes the contents of this report.**

Authorised by:

Keita Kohere - Director Transformation & Relationships

Keywords: Makauri aquifer, MAR

BACKGROUND

1. Background to Makauri Aquifer Recharge (MAR) was included with Report 20-24 submitted to the Operations Committee on 20 February 2020.
2. The MAR project is due to end on 31 December 2020.

DISCUSSION and OPTIONS

3. The amount of water injected as at 31 August 2020 is shown in Table 1 below with the values from 2017 and 2019 included for comparison. So far injection for this year has surpassed the amount injected in 2019, despite a wetter than average winter. This amount is still short of the 73,000m³ injected in 2017, but current injection season is on track to surpass this, but accomplishing this is weather dependent.

	2017	2019	2020*
Days available	N/A#	69	111
Number of injection days	N/A#	33	50
Average Injection Rate	14.2 l/s	13.9 l/s	14.9 l/s
Average Turbidity	3.67 NTU	3.5 NTU	2.6 NTU
Total Volume Injected	73,180 m ³	39,174 m ³	61,973 m ³

Table 1. Injection statistics for the trail data to date. *Injection is still ongoing. #Data not available

4. Letters of invitation to local iwi (Rongowhakaata Iwi Trust, Te Aitanga a Māhaki, Te Whanau A Kai, Ngā Ariki Kaipūtahi, Ngai Tamanuhiri) were sent out on 19 August 2020 asking for nominations to fulfil their positions on the subcommittee. Similarly, a letter to Trust Tairāwhiti was sent on 19 August, and to holders of current Makauri aquifer consents and those on the waiting list on 20 August. As noted in Report 20-20 the subcommittees will act in an advisory capacity to the Operations Committee.
5. Following recommendations from Golder Associates, three independent MAR experts have been approached to quote for a review of the scientific data from all three years of MAR injection. It is planned to appoint the reviewer before the end of September.
6. Financially the project is tracking well. The year-to-date spending is \$10,278, and the total spending to date is \$764,753. The project is currently predicted to finish at or below its assigned budget.
7. An amended version of the end of year report for the injection season ending in October 2019 and an interim report outlining water quality assessment for this year's injection season are now available on the MAR website. Both reports conclude that to date no adverse effects of the injection water has been seen within the aquifer.

ASSESSMENT of SIGNIFICANCE

Impacts on Council's delivery of its Financial Strategy and Long Term Plan

Overall Process: Low Significance

This Report: Low Significance

Inconsistency with Council's current strategy and policy

Overall Process: **Low** Significance

This Report: **Low** Significance

The effects on all or a large part of the Gisborne district

Overall Process: **Low** Significance

This Report: **Low** Significance

The effects on individuals or specific communities

Overall Process: **Medium** Significance

This Report: **Low** Significance

The level or history of public interest in the matter or issue

Overall Process: **Medium** Significance

This Report: **Low** Significance

8. The decisions or matters in this report are of **Low** significance in accordance with Council's Significance and Engagement Policy.

TANGATA WHENUA/MAORI ENGAGEMENT

9. Invitations to iwi to help form the subcommittee have been sent out as noted above.
10. Council staff are still endeavouring to secure the services of a consultant to engage with iwi on what a governance and allocation model for any future MAR scheme would look like.

COMMUNITY ENGAGEMENT

11. Community engagement was undertaken prior to the MAR project commencing.
12. Further iwi and wider stakeholder engagement are to be undertaken as part of points 9 and 10 above.

CLIMATE CHANGE – Impacts/Implications

13. There are no climate change implications associated with the MAR project. The project goal is to try and mitigate climate change impacts, such as less rainfall in the summer.

CONSIDERATIONS

Financial/Budget

14. Draft Financials as at 31 July 2020

Category	Original Budget (full life of project)	Revised Approved Budget	Current Spend 2020/2021	Actual Cost to Date
Capex	\$160,000	\$ 162,000	\$ 2,907	\$292,489
Opex	NOT IN LTP	\$1,030,000	\$ 7,370	\$472,264
TOTAL	\$160,000	\$1,192,000	\$10,277	\$764,753

15. Funding for the MAR operational costs occurred after the adoption of the 2018–2018 Long Term Plan. While it is not included within the Plan, it is now fully funded.

Funding Analysis

Funder	Total Received	Received 2020/21	Confirmed
PGF	\$317,174.66	\$0	\$542,000
ECT/TT	\$488,000	\$0	\$488,000

Legal

16. There are no legal considerations for this report.

POLICY and PLANNING IMPLICATIONS

17. There are no policy and planning implications for this report.

RISKS

18. Risks have not changed since Report 20-24.

NEXT STEPS

Date	Action/Milestone	Comments
September 2020	Hire consultant for independent review of scientific data	
September 2020	Hire consultant to undertake iwi and stakeholder engagement	
1 October 2020	Subcommittee meeting	
22 October 2020	Decision paper to Sustainable Tairāwhiti Committee seeking Council's resolution over its position in developing MAR scheme	
October 2020	End of injection season	
December 2020	End of year report	From Golder Associates
January 2021	Independent review report	