

**Title:** Major Project Report - Makauri Aquifer Recharge  
**Section:** Environmental Services & Protection  
**Prepared by:** Dr Graeme Card PMP - Programme Manager - Science  
**Meeting Date:** 6 August 2020

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Legal: No Financial: No Significance: **Low**

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## Report to OPERATIONS Committee for information

### PURPOSE

The purpose of this report is to provide high-level updates on general progress made with the Managed Aquifer Recharge (MAR) - Makauri aquifer major project. Updates will include year-to-date spend, an analysis of the funding sources (where applicable), risks and the mitigation thereof, as well as discussing the next steps towards a permanent MAR scheme.

### SUMMARY

Injection started on 12 May 2020 but has been severely hampered by an above average level of rainfall. As of 8 July 2020, ~21,000m<sup>3</sup> has been injected but injection has only been possible on a total of 18 out of 57 days, due to the high levels of sediment in the Waipaoa.

Water quality monitoring has been continuing and has not identified any areas of concern.

Steps are being taken to identify and engage an independent assessor who can look at the scientific data gathered and decide if MAR is an appropriate solution to the declining aquifer levels and if a more substantive permanent scheme should be considered/implemented.

Additionally, iwi input is being sought as to how a governance model and allocation scheme might look.

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 content of this report.**

*Authorised by:*

**Keita Kohere - Director Transformation & Relationships**

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**Keywords:** Makauri Aquifer Recharge, MAR,

## BACKGROUND

1. Background to Makauri Aquifer Recharge (MAR) was included with Report **20-24** submitted to the Operations Committee on 20 February 2020.

## DISCUSSION and OPTIONS

2. Sub-committee structure was adopted at the Operations Committee in February 2020 with councillors Faulkner, Foster, Seymour and Gregory filling the positions for the four elected members. The make-up of the other members, including iwi and horticultural representatives, is still being worked through.
3. The current and final trial of MAR ends in December 2020. Data collected thus far has shown **scientifically** that MAR is a good solution to the declining levels of water in the Makauri aquifer.
4. **Environmental** impacts as measured by water quality monitoring also appear to be negligible as long as good quality water is injected into the aquifer.
5. **Culturally**, the impact of MAR on the aquifer and awa are still the subject of much debate and probable opposition to a permanent and larger MAR scheme.
6. Models currently show that, to address the decline in the aquifer and to allow for limited horticultural expansion, around 600,000m<sup>3</sup> p.a. would need to be injected. Depending on the sites chosen this could mean an additional seven to ten bores to meet this requirement.
7. In order to maintain impartiality, Council staff are in the process of identifying an independent person/panel to review the three years of injection data to confirm that MAR is a good and sustainable solution to the declining levels of water in the aquifer and the consequential intrusion of salt-water that is being detected.
8. The governance model and water allocation scheme on which a permanent MAR scheme would be based is crucial to get all interested parties to support this project. Meaningful engagement with local iwi as well as the horticultural sector and, more widely, tax-paying residents of Tairāwhiti is imperative. Seeking the services of a consultant who can interact with all parties is the best chance of moving this issue forward. This issue is likely to be one of the major hurdles that Council and the community will need to negotiate.
9. Council staff are seeking the services of a consultant who can interact with all parties. This is the best hope of getting full and meaningful input from all parties and thus a governance model and allocation scheme that all parties can agree to.
10. In order to better understand the full cost of the infrastructure needed for a permanent MAR scheme, local businesses will be asked to quote for the cost of the infrastructure necessary to implement such a scheme. This will be reported to a future Operations Committee meeting.

## ASSESSMENT of SIGNIFICANCE

Consideration of consistency with and impact on the Regional Land Transport Plan and its implementation

**Overall Process:** Low Significance

**This Report:** Low 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

11. The decisions or matters in this report are considered to be of Low significance in accordance with Council's Significance and Engagement Policy.

## TANGATA WHENUA/MAORI ENGAGEMENT

12. Engagement with iwi will be undertaken as part of point 8 above.

## COMMUNITY ENGAGEMENT

13. Community engagement was undertaken prior to the MAR project commencing.
14. For a proposed permanent MAR scheme further engagement will be necessary and is covered under 12 above.

## CLIMATE CHANGE – Impacts / Implications

15. There are no climate change impacts associated with the MAR project. The project is set up to try to mitigate some climate change impacts, such as less rainfall in the summer.

## CONSIDERATIONS

### Financial/Budget

16. Draft financials as at 30 June 2020:

Category	Original Budget (full life of the Project)	Revised Approved Budget	Current Spend 2019/20	Actual Cost to Date
Capex	\$160,000	\$162,000	\$164,581	\$289,581
Opex	NOT IN LTP	\$1,030,000	\$314,042	\$464,894
TOTAL	\$160,000	\$1,192,000	478,623	\$754,475

17. 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 2019/20	Confirmed
PGF	\$317,147.66	\$226,710	\$542,000
ECT/TT	\$488,000	\$488,000	\$488,000

#### Legal

18. There are no legal considerations for this report.

#### POLICY and PLANNING IMPLICATIONS

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

#### RISKS

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

#### NEXT STEPS

Date	Action/Milestone	Comments
May-Dec 2020	Water quality monitoring to continue	
August 2020	Contract with consultant to provide iwi engagement	To engage with iwi on governance and allocation issues
August 2020	Finalise membership of sub-committee	
August 2020	Appoint independent reviewer of MAR data	
September 2020	Hold sub-committee meeting	
October 2020	End of injection season	
December 2020	End of year report	From Golder Associates