

Title: Managed Aquifer Recharge Update
Section: Environmental Services & Protection
Prepared by: Lois Easton (Environmental & Science Manager)
Meeting Date: 12 September 2018

Legal Financial Significance = Medium

Report to ENVIRONMENTAL PLANNING & REGULATIONS Committee for information

SUMMARY

This report is to update the Environmental Planning and Regulations Committee on the Managed Aquifer Recharge (MAR) Stage 2 Trial.

The Council has now been advised by both the Eastland Community Trust (ECT) and the Provincial Growth Fund that the funding for the project has been approved. Combined with the Council funding in the Long Term Plan the Stage 2 Trial will be fully funded.

The Council has also received the resource consent for the Stage 2, and new monitoring bores to support the trial have been drilled. Monitoring equipment is presently being installed. Several private bores which were used for monitoring and had failed have been closed. One will be replaced with a Gisborne District Council monitoring bore in a similar location.

Both the ECT funding and the resource consent have conditions on engagement with Rongowhakaata Iwi Trust, and the next step is engaging with Rongowhakaata to progress the cultural impact assessment required.

A Mauri Compass assessment of the trial is also being undertaken as part of the cultural framework agreed with Te Aitanga a Mahaki. The resource consent also requires that the Community Liaison Group set up for the stage 1 trial continue.

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

RECOMMENDATIONS

That the Environmental Planning & Regulations Committee:

1. Notes the contents of this report.

Authorised by:



Nicholas Zaman
Director Environmental Services & Protection

Keywords: Managed Aquifer Recharge, MAR Trial

BACKGROUND

1. The Makauri Aquifer's water levels are in decline. If Council reduces or restricts irrigator access to the aquifer it will have a considerable impact on the local economy. The aquifer is an essential water source for irrigating crops, worth an estimated \$20M annually to local industry.
2. The purpose of the Managed Aquifer Recharge (MAR) trial is to determine if application of managed aquifer recharge technology will increase the water levels safely in the Makauri Aquifer.
3. The MAR concept was first introduced to Council at the 2012, NZ Hydrological Society conference. In 2013 the Freshwater Advisory Group was introduced to the MAR as a potential management option for the Poverty Bay flats aquifers.
4. Council then investigated its specific application to the Makauri Aquifer and a stage 1 trial was undertaken over the 2017 winter. The trial site is at Kaiaponi Farms with the Waipaoa River as the source water and during the stage 1 trial a total of 72,811m³ of water was injected into the aquifer with no apparent adverse environmental effect.
5. A Community Liaison Group has since been set up as part of the trial's consent conditions. The group comprises councillors, iwi, irrigator users and council staff representatives, based on the trials initial stakeholder advisory group which was set up during the consultation phase.
6. With the successful Stage 1 trial the Council resolved at the Future Tairāwhiti meeting of 20 July 2017(17-252) to proceed with a Stage 2 Trial.

DISCUSSION and OPTIONS

7. Funding of \$80,000 in the 2018/19 and 2019/20 financial years of \$80,000 per year has been provided to support the trial. This will be used on the capital components (monitoring bores and headworks). Funding of \$542,000 was sought and has been granted from the Provincial Growth Fund (PGF). Funding of \$448,500 was sought from the Eastland Community Trust (ECT) and we have received verbal confirmation that has now been granted.
8. As part of the conditions of funding from the Eastland Community Trust, engagement with Rongowhakaata Iwi Trust is required.
9. Both funding grants were conditional on receiving resource consents for the stage 2 trial.
10. A Variation to the Stage 1 consent was lodged in March 2018 to enable the Stage 2 trial to proceed. This was Limited Notified to Rongowhakaata Iwi Trust, who then submitted in opposition to the trial. A hearing was held on 3 August 2018 in front of an independent commissioner. The commissioner has reached his decision and granted GDC resource consent. The main new condition is that the Council must engage with Rongowhakaata Iwi Trust around the development of a Cultural Impact Assessment.
11. The Stage 2 trial is intended to commence in 2019 as soon as the Waipaoa River is reliably above 4000 l/s after the summer irrigation season has ended. The exact date will depend on the type of summer we have. A long dry summer will result in a later start date, a summer similar to 2017/18 could mean the stage 2 trial starting in April.
12. Ahead of the Stage 2 trial the preparatory work needed is being undertaken. This includes the drilling of new monitoring bores (a key recommendation of the Stage 1 trial).

In addition, condition assessments of all private bores used for monitoring have been undertaken. This identified that several of the private bores used for monitoring had failed. These failed bores have been closed. As a result, a further Council monitoring bore will be installed near to the site of one of the failed/closed bores, to ensure we have good monitoring coverage of water quality and groundwater level impacts of the trial.

13. A Mauri Compass assessment of the trial is also being undertaken as part of the cultural framework agreed with Te Aitanga a Mahaki.

ASSESSMENT of SIGNIFICANCE

Criteria	This Report	The Process Overall
The effects on all or a large part of the Gisborne district	Low	Medium
The effects on individuals or specific communities	Low	High
The level or history of public interest in the matter or issue	Medium	Medium
Inconsistency with Council's current strategy and policy	Low	Low
Impacts on Council's delivery of its Financial Strategy and Long Term Plan.	Low	Low

14. This report is part of a process to arrive at a decision that will be of medium level in accordance with the Council's Significance and Engagement Policy. This is due to the community interest and the economic significance of the Makauri Aquifer to the horticultural sector.

COMMUNITY ENGAGEMENT

15. Extensive public engagement has taken place on the MAR project. To date, meetings have been held with groups including the Freshwater Advisory group, water users, Iwi land owning entities, Iwi trusts, individuals and one public meeting.
16. All technical papers on the MAR trial are available on the Council website. A Community Liaison Group has been formed and this group has had four meetings about the project.
17. Further communications are planned and will be ongoing throughout the project.

CONSIDERATIONS

Financial/Budget

18. With the notice from both the Provincial Growth Fund and the Eastland Community Trust that the funding requested has been granted, the full funds available for implementation of the MAR Stage 2 trial are now in place.

Legal

19. There are no legal implications.

POLICY and PLANNING IMPLICATIONS

20. There is policy support within the Proposed Freshwater Plan for projects like MAR recognising that water storage is an important solution to meet both current and future needs for water. The MAR trial project is identified as a key non-regulatory project in the Waipaoa Catchment Plan.

RISKS

21. There are no major risks associated with the matters discussed in this report.

NEXT STEPS

Date	Action/Milestone	Comments
September - February	Engagement with Rongowhakaata Iwi Trust around cultural assessment	
	Preliminary science studies to support the trial	
Autumn 2019	Stage 2 Trial commences when river levels are reliably above 4000 l/s	