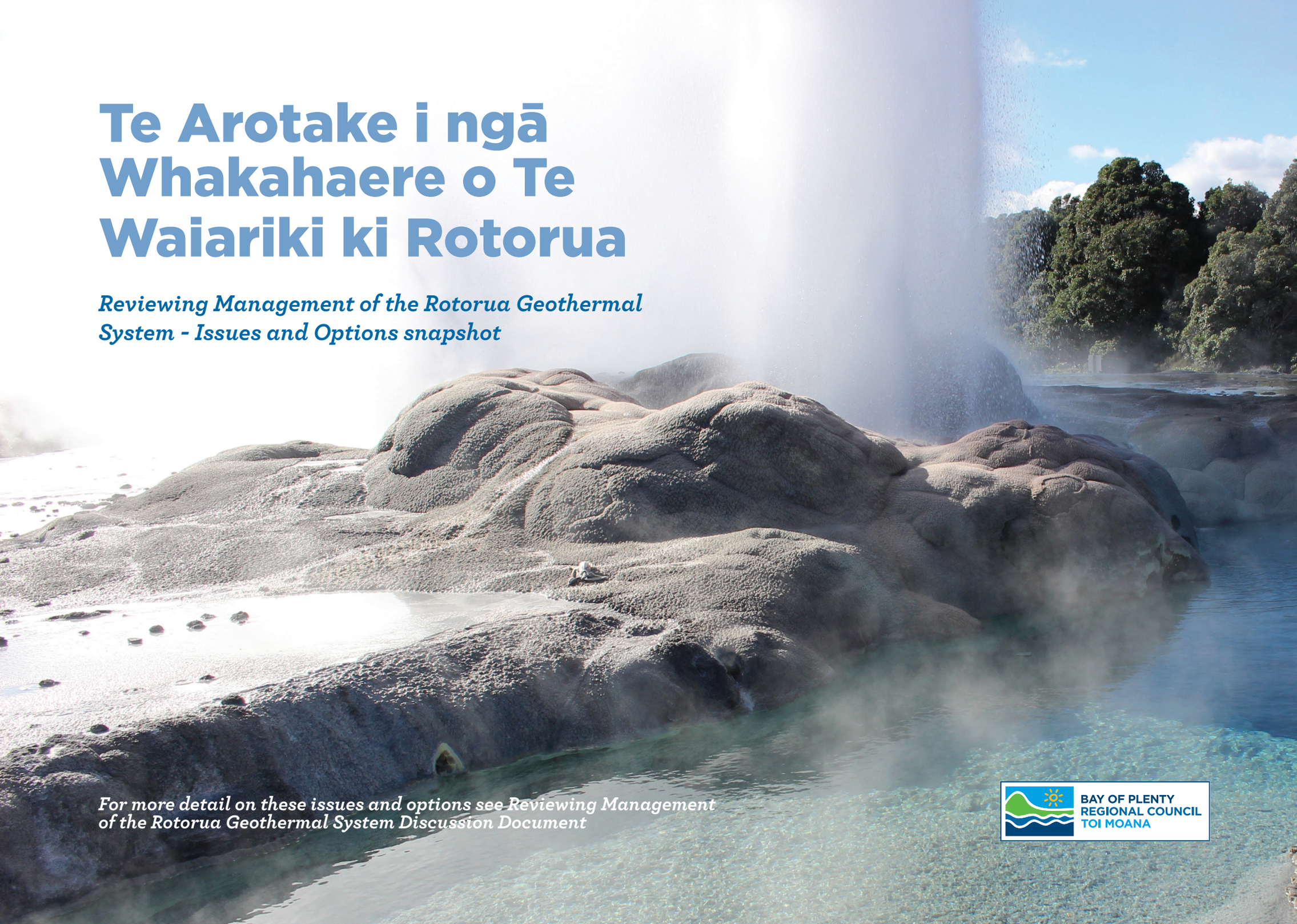
Te Arotake i ngā Whakahaere o Te Waiariki ki Rotorua

Reviewing Management of the Rotorua Geothermal System - Issues and Options snapshot



For more detail on these issues and options see Reviewing Management of the Rotorua Geothermal System Discussion Document

BAY OF PLENTY REGIONAL COUNCIL
TOI MOANA

Your Views

We want your ideas on the future management of the Rotorua Geothermal System to help our review of the Rotorua Geothermal Regional Plan.

PAST USE

- *Bore closure to protect features*
- *Surface feature decline*
- *Increasing uncontrolled use of fluid and heat*
- *European settlement and tourism*
- *Sustainable use by Māori*

CURRENT MANAGEMENT

Bay of Plenty Regional Council manages the geothermal system under the Resource Management Act 1991 (RMA), using the Regional Policy Statement (RPS) and the Rotorua Geothermal Regional Plan as guidance for resource consents. We must manage the Rotorua Geothermal System sustainably and to protect surface features. The current regional plan does this by requiring reinjection, limiting net loss of water to the system and controlling taking of heat and water near Pohutu Geyser.

IS THE GEOTHERMAL SYSTEM HEALTHY NOW?

Our monitoring and research tells us that the system's health has improved. More reinjection has led to water levels in the aquifer increasing by over two metres. As a result some surface features have recovered well, but not all. We know that at least some of what we are doing now has worked - we need to move forward carefully so we don't repeat the mistakes of the past.

KEY STEPS TO REVIEW THE PLAN

We need to review the regional plan to make sure that it is dealing with the right issues and doing this effectively. Our starting point is checking what we know – what the RPS tells us to do, monitoring trends, where the current plan is working, and where it is not. From there we can identify key issues and options for the new plan.

To start the discussion some possible issues and options have been identified. Some of these options are new, but we have also kept what is already working well. We need your thoughts on whether these options are heading in the right direction.

NOW

Community values
Draft issues, objectives and options
Stock take of information

Key opportunity for input

EARLY 2020

Refine issues, objectives and options (eg. principles for use)
Modelling and testing

THEN

Rotorua System Management Plan

Key opportunity for input

THEN

Draft regional plan provisions

Key opportunity for input

THEN

Publicly notify Proposed Regional Plan Change

LATER

Submissions, hearings and appeals
Adopt Operative Plan

Key opportunity for input

What are our draft issues and options for management?

1 *Taking geothermal water and heat from the geothermal system can cause adverse effects on its long term sustainability and on geothermal surface features.*

SOME OPTIONS TO ADDRESS THIS ISSUE ARE:

- Continue to make protection of surface features a priority over extractive use
- Manage the system as a whole (i.e. integrated management)
- Continue to require reinjection to maintain (or enhance) groundwater levels
- Continue to limit taking of water and heat in some areas
- More efficient use (i.e. best use for most people)

2 *Land uses near geothermal surface features can cause adverse and irreversible effects to these features, and increase the risk of geothermal hazards to people.*

SOME OPTIONS TO ADDRESS THIS ISSUE ARE:

- Identifying and mapping all significant geothermal surface features in the Rotorua System
- Controlling land uses like damming, diversion, earthworks and vegetation clearance through rules in the regional plan
- Making sure developments are set back from features through rules and guidelines

3 *The discharge of geothermal water to land, air and water can cause adverse effects on the receiving environment.*

SOME OPTIONS TO ADDRESS THIS ISSUE ARE:

- A system wide discharge strategy that addresses discharges in an integrated way
- Managing effects of land soakage (e.g. slumps or subsidence), or discharges to lakes and streams (e.g. contaminants) through resource consents
- Working with the community to reduce cumulative effects of many small discharges.

4 *There are limits to resource use and current allocation of the resource may not reflect the needs, values and aspirations of tangata whenua and the local community.*

SOME OPTIONS TO ADDRESS THIS ISSUE ARE:

- Protection of the customary use by tangata whenua of their Ngawha
- Allocation principles that prioritise use to maximise value gained (e.g. efficient uses)
- Better information about who is accessing the resource and for what purpose
- Decision making that better represents the relationship of tangata whenua with ngāwha

5 *Understanding of the geothermal resource, the effects of use and its sustainable limits is incomplete, does not use mātauranga Māori; and creates uncertainty for the management of the resource.*

SOME OPTIONS TO ADDRESS THIS ISSUE ARE:

- Integrated whole system understanding of the resource
- Mātauranga Māori to inform management
- Continuing to build our knowledge through monitoring and research (e.g. data on actual use)
- Evidence based decision-making
- A precautionary approach in allocation (i.e. work within our knowledge constraints)

6 *The drilling and use of geothermal wells can lead to harmful effects on people and the environment.*

SOME OPTIONS TO ADDRESS THIS ISSUE ARE:

- Best practice construction, maintenance and abandonment of wells as conditions of consent to keep people and property safe (e.g. from well blow outs)
- Reducing the number of wells by enabling efficient/shared use

Whakahokinga Whakaaro
Feedback Form

He aha ou whakaaro? What do you think?

Please return this form to Bay of Plenty Regional Council, Reviewing Management of the Rotorua Geothermal System, PO Box 364, Whakatāne 3158, or email your comments to **geothermal@boprc.govt.nz** or fill out the online form at **www.boprc.govt.nz/geothermal**

Your details

First Name: _____

Surname: _____

Phone Number: _____

Email Address: _____

Suburb: _____

Your gender:

- ◯ Male
- ◯ Female
- ◯ Gender diverse

Your ethnicity:

- ◯ European
- ◯ Māori
- ◯ Pacific Islander
- ◯ Asian
- ◯ Middle Eastern/ Latin American/African
- ◯ Other, please specify:

Your age:

- ◯ 0-17 years
- ◯ 18-24 years
- ◯ 25-34 years
- ◯ 35-44 years
- ◯ 45-54 years
- ◯ 55-64 years
- ◯ 65 or older
- ◯ I'd rather not say

ISSUES AT A GLANCE

1. *Taking geothermal water and heat from the geothermal system can cause adverse effects on its long term sustainability and on geothermal surface features.*
2. *Land uses near geothermal surface features can cause adverse and irreversible effects on these features, and increase the risk of geothermal hazards to people.*
3. *The discharge of geothermal water to land air and water can cause adverse effects on the receiving environment.*
4. *There are limits to resource use and current allocation of the resource may not reflect the needs, values and aspirations of tangata whenua and the local community.*
5. *Understanding of the geothermal resource, the effects of use and its sustainable limits is incomplete, does not use matauranga Māori; and creates uncertainty for the management of the resource.*
6. *The drilling and use of geothermal wells can lead to harmful effects on people and the environment.*

Your comments

Q1: What do you value about the Rotorua System?

Q2: Do you think the key issues that we have identified in this document are the correct issues?

Q3: Are any key issues missing?

Q4: Is there anything you think needs changing in the way we currently manage the system?

Q5: Is there anything else you'd like to tell us?

If you require more space please feel free to attach extra pages.