Appellant	**Contact Energy Limited**
Respondent	**Waikato Regional Council**
Decision Number	CIV-2006-404-7655
Court	Woodhouse J; High Court Auckland
Judgment Date	20/12/2007
Counsel/Appearances	Dixon, HR; Green, PD; Milne, J; Robinson, TP; Vane, AFS
Cases Cited	Auckland CC v Wotherspoon 22/09/89, Fisher J, HC Auckland AP26/89, [1990] 1 NZLR 76, (1989) 5 CRNZ 110; Countdown Properties (Northlands) Ltd v Dunedin CC 07/03/94, Barker, Williamson & Fraser JJ, HC Wellington AP214/93, AP215/93, (1995) 1B ELRNZ 150, 3 NZPTD 471, [1994] NZRMA 145; Green & McCahill Properties Ltd v Auckland RC 18/08/97, Salmon J, HC Auckland HC4/97, [1997] NZRMA 519; Manukau CC v Mangere Lawn Cemetery Trustees 24/04/91, Chilwell J, HC Wellington AP304/89, (1991) 15 NZTPA 58; Marlborough Ridge Ltd v Marlborough DC C111/97, (1997) 3 ELRNZ 483, [1998] NZRMA 73, 2 NZED 751; NZ Suncern Construction Ltd v Auckland CC 23/06/97, Fisher J, HC Auckland HC105/96, (1997) 3 ELRNZ 230, [1997] NZRMA 419; Rodney DC v Gould 11/10/04, Cooper J, HC Auckland CIV-2003-485-2182, (2005) 11 ELRNZ 165, [2006] NZRMA 217; Royal Forest and Bird Protection Soc Inc v WA Habgood Ltd 31/03/87, Holland J, HC Wellington M655/86, (1987) 12 NZTPA 76; St Lukes Group Ltd v North Shore CC A041/01, [2001] NZRMA 412, 6 NZED 446; Stark v Auckland RC 28/06/94, Blanchard J, HC Auckland HC5/94, [1994] 3 NZLR 614, [1994] NZRMA 337; Takamore Trustees v Kapiti Coast DC 04/04/03, Ronald Young J, HC Wellington, AP191/02, [2003] 3 NZLR 496, [2003] NZRMA 433; Westfield (NZ) Ltd v Hamilton CC 17/03/04, Fisher J, HC Hamilton CIV-2003-485-956, CIV2003-485-954, CIV-2003-485-953, (2004) 10 ELRNZ 254, [2004] NZRMA 556
Statutes	Resource Management Act 1991, s 5, s 32, s 32(4)(a), s 63(1), s 68(3), s 248, s 253, s 265, s 276(1)(a), s 299, s 299(1); High Court Rules, r 540(4)
Full text pages:	40 pages

Keywords
High Court; geothermal; regional rule; discharge to water; discharge to land; activity discretionary; activity non complying; error; evidence; effect; costs and benefits

Significant in Planning and Law, s 68(3) RMA.
The requirement in s 68(3) RMA to have regard to environmental effects does not mean that every rule in a Regional Plan must have an effects-based rationale. Although the Environment Court may not have used an effects-based rationale to establish a rule as to water discharge thresholds, it had nevertheless met its statutory obligations under s 68(3) RMA.

SYNOPSIS

This was a decision on an appeal by Contact Energy Ltd ("Contact") against the Environment Court decision setting geothermal discharge thresholds under a rule of the Waikato RC ("WRC") regional plan. The rule, combined with another rule, provided that: (i) any discharge of geothermal water onto land or into surface water not exceeding 15,000 tonnes per day ("tpd") and not exceeding 2.5 million tonnes per year ("tpy") was a discretionary activity; and (ii) any discharges of geothermal water onto or into surface water above those thresholds was a non-complying activity.

Contact objected to the non-complying classification for discharges over the daily and annual limits, as it would need to satisfy more onerous requirements to obtain a resource consent for discharges above these limits. Contact appealed on grounds that: the thresholds adopted by the Environment Court were arbitrary and inherently unreasonable because the Environment Court did not use an effects based rationale; having rejected the alternative rule formulation proffered by Contact as equally arbitrary, the Environment Court was bound to reconsider its approach and the Environment Court's rejection of the Contact approach did not give WRC's approach greater cogency; the Environment Court had no evidence to undertake an assessment under s 32 RMA; and the annual cap given by the Environment Court was arbitrary.

The Court considered that the RMA does not stipulate that every rule must have an effects-based rationale. The regional council, and therefore the Environment Court on an appeal, must have regard to effects on the environment, and any adverse effects in particular, but this does not mean the rule must have an effects-based rationale. The Court considered

the Environment Court had met the statutory obligation to the extent required by s 68(3) RMA. The Court considered it was not open to the Court on appeal of a point of law to review the Environment Court's finding of a particular figure and it was open to the Environment Court to weigh the evidence and come to a conclusion about the tpd threshold.

The Court ruled that the Environment Court had preferred the approach proffered by the WRC on its own merits and there was no appealable error of law by failing to explore possible options not before the Court when one of the options before the Court was accepted. The Court considered that there was no error of law by failing to articulate all of the reasoning provided it was clear that the Environment Court turned its mind to the relevant statutory provisions and had evidence to justify a conclusion. The Court found there was evidence before the Environment Court enabling a cost benefit analysis and there was no error of law by the Environment Court not setting out in its final decision a detailed analysis — analysis at that level of detail is not required under s 32. The Court ruled that the annual threshold decided by the Environment Court was an entirely logical one and there was no error of law.

The appeal was dismissed. The Court held the WRC and Taupo DC were entitled to costs.

FULL TEXT OF CIV-2006-404-7655

JUDGMENT OF WOODHOUSE J (reserved):

Introduction

[1] This is an appeal against a decision of the Environment Court dated 17 November 2006. The decision relates to a rule in the regional plan of the Waikato Regional Council governing discharges of geothermal water onto land or into surface water.

[2] The rule, combined with another rule, provides, in summary:

(a) Any discharge of geothermal water onto land or into surface water not exceeding 15,000 tonnes per day ("tpd") and not exceeding 2.5 million tonnes per year ("tpy") is a discretionary activity.

(b) Any discharges of geothermal water onto land or into surface water above those thresholds is a non-complying activity.

[3] The appellant ("Contact") objects to the non-complying classification for discharges over the daily and annual limits.

This classification means that it will be more difficult for Contact to obtain a resource consent for discharges above these limits, as it will need to satisfy more onerous requirements. Contact contends that in four respects there were errors of law by the Environment Court in fixing the thresholds. Its written summary of the four grounds was as follows:

Ground 1

"The thresholds adopted by the Environment Court are arbitrary and inherently unreasonable. In particular, there was no evidential basis which would justify those thresholds by reference to effects on the [receiving] environment. In the absence of any evidential basis for those thresholds, the Environment Court's conclusion, approving them, was an error of law. [The word "receiving" was added orally.]"

Ground 2

"Having rejected the alternative rule formulation proffered by [Contact] as equally arbitrary, the Count [sic] *was bound to reconsider its approach, either to identify a rule framework which was less arbitrary, or alternatively, which did not involve a threshold above which discharges of geothermal water would be non-complying. The Environment Court did not do either of those things, again constituting an error of law."*

Ground 3

"The Court incorrectly found that it was in a position to make a balanced and informed judgment having regard, inter alia, to s 32 of the Resource Management Act 1991 ("the Act"). In the absence of any quantification in the evidence before the Court of the benefits and costs of the discretionary rule thresholds adopted by the Court and therefore in the absence of any basis for determining whether the benefits of that threshold outweighed the costs, the Environment Court could not comply with s 32 of the Act, and its failure to do so amounted to an error of law."

Ground 4

"The Court determined the need for an additional annual threshold of 2.5 million tonnes per year (cumulative on the alternative limit of 15,000 tonnes per day) without having regard to the implications that additional threshold would have for activities where reinjection or injection is impracticable, notwithstanding that it had identified the need to provide for such

> *activities. On the Court's own reasoning, this was a relevant consideration. Failure to have regard to it amounted to an error of law."*

[4] As to the particular error or errors of law relied on, Contact said in its principal written submission:

> *This appeal is principally based on the contention that the Environment Court, in this case, came to a conclusion without evidence or one to which, on the evidence, it could not reasonably have come.*

Because these contentions are central to the appeal, and because of the principles governing appeals on points of law and additional principles governing appeals from a tribunal with specialised expertise, it is necessary to set out in some detail the planning history and findings of the Environment Court.

The Regional Council planning processes and Environment Court hearings

[5] This appeal, directed to a single rule in the regional plan dealing with the entire Waikato geothermal resource, is the only issue remaining from the process of notifications, reviews, hearings and appeals in relation to the Waikato Regional Council's geothermal policy and plan. This process commenced in October 1993. It ended at the Environment Court stage 13 years later with the delivery of the decision under appeal in November 2006.

[6] The Waikato Regional Policy Statement was publicly notified in October 1993. It became fully operative in October 2003. A proposed Waikato Regional Plan was notified in September 1998. Decisions were released in October 2001. The plan had what was a called a "geothermal module". There were challenges to the consistency between the plan and the policy statement by, in particular, Contact and Mighty River Power Limited. As a result, the Regional Council undertook a comprehensive review of its policy statement and plan in relation to the geothermal policy. The Regional Council decided "to provide an integrated framework for the management of geothermal resources in the region". This led to notification on 23 August 2003 of the Regional Council's proposed Change No. 1: Geothermal Section to the Waikato Regional Policy Statement and proposed Variation No. 2: Geothermal Module to the Proposed Waikato Regional Plan.

[7] The process leading to decisions on the proposed policy change and plan variation extended over almost 10 months from notification in

August 2003 until decisions were released on 12 June 2004. Submissions were sought on two occasions, in September and October 2003. Regional Council staff recommendations on submissions were notified to submitters on 24 November 2003. There were hearings in December 2003 and January and February 2004. The decisions were released on 12 June 2004.

[8] Before the Regional Council's decisions on the proposed policy and plan changes were released, hearings had commenced for applications to the Regional Council for consents to discharge geothermal water. This included applications by Contact to discharge 60,000 tpd of geothermal water and 35,000 tpd of geothermal condensate (included in the definition of geothermal water) into streams running into the Waikato River. The overlap between the processing of decisions on the proposed policy and plan changes and detailed consent applications was accepted as relevant by the parties involved in both proceedings and, subsequently, in the appeals to the Environment Court. The consents hearings before Commissioners appointed by the Regional Council were over 32 days between 1 March and 24 June 2004. Contact was granted the consents it sought. They are effective to 2026.

[9] Five parties appealed to the Environment Court from the Regional Council's June 2004 decisions on the geothermal policy statement and the geothermal plan. Two of the appellants are parties to this appeal, Contact Energy and Taupo District Council. The Regional Council was, of course, respondent before the Environment Court as it is in this Court.

[10] The decision now under appeal was the second decision of the Environment Court on those appeals. The first decision, described by the Environment Court as an "interim decision", is dated 13 April 2006. I will refer to the hearing leading to the interim decision as the first hearing and to the hearing leading to the decision under appeal as the second hearing. The decision directly under appeal in this Court is referred to as the final decision. It will be necessary to refer to the interim decision. It was accepted by all parties to this appeal that the interim decision is relevant, and that is undoubtedly correct. Although there were two hearings with two decisions, they relate to one set of appeals. This is discussed more fully below.

[11] The first hearing took place over 42 sitting days between September and December 2005. The Court heard from 46 witnesses, many of them experts with worldwide recognition in their respective fields. Most witnesses were cross-examined. There were 2,582 pages of transcript. The interim decision was released on 13 April 2006. It is 105 pages.

[12] The second hearing took place over 7 days between 7 and

16 August 2006. The final decision was released on 17 November 2006.

[13] Because the second hearing was a continuation of the first hearing, the Court panel was unchanged. The panel consisted of an Environment Court Judge with three Commissioners — a planner, an ecologist, and an engineer.

[14] The same Environment Court panel was convened to hear and determine appeals from the Regional Council's consents decisions. The hearing on the consents appeals commenced on 4 December 2006 and extended over 52 hearing days to February 2007. 35 days of the consents appeal hearing occurred before delivery of the final decision on 17 November 2006. The consents appeal decision was released on 18 May 2007. The consents granted to Contact were upheld with modification of conditions as sought by Contact.

The first hearing and the interim decision

[15] The two main issues before the Court at the first hearing were whether regional policy should:

(i) require reinjection of the extracted geothermal water back into the same geothermal system; and

(ii) provide for a single operator (or single tapper) for each geothermal system.

A subsidiary issue was whether discharges of geothermal water to ground or surface water should be prescribed in the Geothermal Module or the Water Module of the proposed plan.

"Reinjection" was defined in the interim decision as meaning "the discharge of available geothermal water, with or without make up water, through a well bore into subterranean formations in the same system from which the geothermal water was produced". Another means of disposing of geothermal water is "injection". This was defined as "the discharge of water, regardless of where this water originated, through a well bore into subterranean formations inside or outside a geothermal system".

[16] Although the main focus of the Environment Court was on these issues, the hearing ranged more widely. The Court said:

> *[3] While these issues were the focus of attention during a lengthy hearing, they could not be isolated from the other provisions of the Change and Variation. Accordingly the evidence addressed other provisions of the Change and Variation, although not as comprehensively as the specific policies on reinjection and*

> *single tapper. Also, because of the linkages and overlaps between the various provisions, we in the course of this decision, will of necessity comment at times on other provisions. This is also necessary for contextual reasons.*
>
> . . .
>
> *[59] The main focus of the hearing was accordingly on the broad policy matters critical to the two issues of reinjection and single operator. Needless to say the policy matters could not be considered in isolation, but needed to be considered in the context of the flow down effects through the objectives, policies, and rules of the proposed plan.*

As to its decision making and recording the Court said:

> *[5] . . . It is not possible, in the interests of brevity and efficiency, to discuss in detail all of the evidence or even refer to all of the witnesses. However, we have regard to the totality of the evidence.*
>
> *[6] Further, much of the detail, particularly in relation to specific geothermal systems and the effects of abstraction, while helpful as background, is not specifically required to be determined for the purposes of the broad policy issues which are the focus of these proceedings. Accordingly, if specific parts of the evidence are not averred [sic] to in this decision we mean no disrespect to the parties or their witnesses. We reiterate we have taken into account all of the evidence.*
>
> *[7] In this regard we note the observations of Cooper J in* Rodney District Council v K F Gould and F Y P Gillain *where he said:*
>
> > *. . . it is axiomatic that no Court is obliged to make a finding of fact (unless the issue concerns a jurisdictional fact) and a failure to do so will not generally give rise to an error of law:* Auckland City Council v Wotherspoon *(1990) 1 NZLR 76, at 88-89. Secondly, and partly as a consequence, it is not possible to conclude that the Court did not consider evidence it has not referred to in its decision. It might have considered the evidence but has not thought it worthy of mention; there is no general duty of a Court to recite all the evidence it has heard, and give reasons for accepting or rejecting each statement made to it by a witness.*

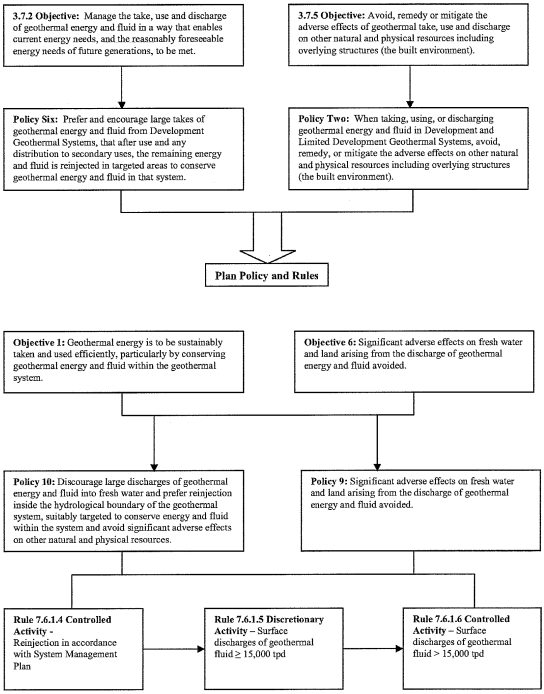
[17] Of the three issues identified by the Environment Court those of importance on the present appeal are the first and the third. In relation to the first — the reinjection policy — the Court said:

> *The policy framework of the Change and Variation recognises reinjection as a preferred course of action directed at achieving two primary objectives:*
>
> *(i) Managing the take, use and discharge of geothermal energy and fluid in a way that enables current energy needs, and the reasonably foreseeable energy needs of future generations, to be met; and*
>
> *(ii) Avoiding, remedying or mitigating the adverse effects of geothermal take, use and discharge on other natural and physical resources including overlying structures (the built environment).*

[18] The linkage between these broad objectives and more detailed policies and rules was set out in a diagram produced by a planning consultant called by the Regional Council. This was adopted by the Court and is conveniently reproduced for the purposes of this decision. The rule in contention (although now with different numbering) is rule 7.6.1.6 recorded at the foot of the diagram (see overleaf).

RPS Policy – Reinjection

Figure 1: Reinjection Policy Framework



[19] The Environment Court described the essence of Contact's case on the reinjection issue as follows:

> *[93] Contact seeks amendments to provide greater recognition of potential effects of reinjection of geothermal water - for example reservoir cooling. It supports a policy regime which prefers and encourages reinjection of geothermal water,* **but which also recognises the need for effects-based assessment** *as to whether, in a particular case, reinjection is the most appropriate way to achieve the relevant objective of providing for existing and future energy needs. (emphasis added)*

The Court recorded the policy wording sought by Contact for an effects-based assessment, and continued:

> *[95] Contact's relief also seeks . . . flow-on amendments to the implementation methods in the proposed Change to the policy statement, and the policy and rules to the proposed plan, to give effect to its sought after change to Policy Six.* **The culmination of these proposed amendments would be to reduce the status of discharges of geothermal water over 15,000 tons per day, other than by reinjection, from a non-complying status to a discretionary status.** *(emphasis added)*

[20] Although the Environment Court was not required in its in interim decision to determine the appropriateness of the specific measurement of 15,000 tpd, issues relating to it of concern to Contact were squarely before the Court at the first hearing. What is recorded in the Environment Court's interim decision in [93] and [95], quoted above, is in considerable measure the foundation for the first ground of appeal to this Court, albeit directed in the Environment Court to broader questions of Regional Council objectives and policies. The analysis undertaken by the Environment Court included effects-based assessments, and assessments of costs and benefits under s 32 of the Resource Management Act (RMA) relating to a wide range of issues concerning disposal of geothermal water.

[21] The interim decision covering the first main issue — reinjection — covered 50 of the 105 pages. After setting out the positions of the parties, including that of Contact summarised above, five sub-issues were carefully considered: (1) the effects of reinjection on the geothermal resource; (2) reinjection: subsidence effects of exploitation and their mitigation by reinjection; (3) effects of exploitation on geothermal features and hydrothermal eruptions and mitigation by reinjection; (4) the use of reinjection to avoid surface contamination by discharge to land and waterways; and (5) cost of reinjection.

[22] One general feature that emerges from the Environment Court's

analysis and findings, and again bearing on the present appeal, is that the assessment of effects and of costs and benefits of a particular means of disposing of geothermal water involves a good deal more than such assessments focused only on the receiving environment from the particular means of disposal. For example, disposal into a river requires consideration not only of the effects on the river — the receiving environment — against the costs of disposal into a river compared with other means of disposal. There is also need to consider amongst other things effects and costs and benefits of *not* putting the geothermal water back into the ground, either by reinjection or by injection.

[23] The analysis undertaken by the Environment Court in its interim decision needs to be noted in relation to four of the five sub-issues identified for consideration under the first main issue of reinjection. The sub-headings that follow in this judgment are taken from the Environment Court's sub-headings encapsulating the sub-issues.

Sub-issue 1: the effects of reinjection on the geothermal resource

[24] Following an extended discussion under this heading, the Court summarised its conclusions at paras [137] — [139]. Paragraphs [137] — [138] were so central to the final decision that they were reproduced in the final decision. They are set out below, with the first sentence of [139]:

> *[137] We find that a variety of effects are likely to a geothermal system and its productive capacity as a result of a reinjection regime. Some would be beneficial to the system and productive capacity while others would have potential risks. The recognised and accepted benefits include:*
>
> *(i) The avoidance of surface discharge of wastewater, eliminating the risk of environmental pollution;*
>
> *(ii) Reservoir pressure support and the consequent lessening of well productivity decline;*
>
> *(iii) Extraction of heat from reservoir rocks; and*
>
> *(iv) Minimising new risks of ground subsidence (which we discuss later).*
>
> *[138] The potential risks include:*
>
> *(i) The premature cooling of the geothermal water in some wells (if a reinjection well is sited unduly close to a production well);*

> *(ii) Quenching of the steam cap (if the unwise step of reinjection into a steam cap is taken) with the consequent collapse of production from some wells;*
>
> *(iii) Reduction in the natural recharge of hot water into the reservoir due to increased reservoir pressure; and*
>
> *(iv) Causing small-scale seismic activity.*
>
> *[139] We are satisfied on the evidence, that the potential adverse effects of reinjection are manageable provided an adaptive management reinjection strategy is carried out . . . .*

Sub-issue 2: reinjection: subsidence effects of exploitation and then mitigation by reinjection

[25] This was the subject of a major difference between witnesses called for Contact and those called for Taupo District Council, with the latter particularly concerned about subsidence affecting Taupo township. The consideration of the issues by the Environment Court led to several findings, including this:

> *[205] We find that both infield reinjection and targeted injection is more than likely to be beneficial to the mitigation of subsidence. However, it is clear from the evidence of the experts, that any such reinjection needs to be carefully managed and carefully monitored, and should be entirely flexible. We have also noted that reinjection may in certain circumstances have adverse effects. Further, there is a certain cost in reinjecting the fluid back into the system, particularly targeted reinjection, which we discuss later in this decision.*

Sub-issue 4: the use of reinjection to avoid surface contamination by discharge to land and waterways

[26] The immediate purpose of the Court's inquiry under this heading was in respect of the broad policy issue concerning reinjection. However, the subject is also of direct relevance to Contact's argument at the second hearing that all surface discharges (onto the ground or into surface water) should be discretionary activities with no volumetric limit beyond which the activity would be non-complying. For this reason it is convenient to set out the Court's evaluation following its discussion of the evidence on this topic:

> **Evaluation of avoidance of contamination of freshwater by reinjection**

[238] The avoidance of contamination of freshwater by reinjection is accepted as best practice by a number of the expert witnesses that were called. Such a practice is accepted even by Third World countries. As Dr Home stated:

> *Reinjection of all the water remaining after the power plant is a normal practice in most geothermal developments worldwide. Reinjection of all the remaining water, except for a small and occasional exclusion for testing purposes, is usually an environmental necessity.*

[239] Dr Stefansson stated that:

> *In the review paper on geothermal reinjection experience published in 1997 (Stefansson, 1997) it is concluded that disposal of geothermal wastewater is the most common reason for applying reinjection in geothermal operations.*

And:

> *It should be realized that most of the reinjection taking place in the world at present is done for the purpose of getting rid of the effluent fluid.*

[240] In the Regional Policy Statement, Objective 3.4.5 Water Quality states:

> *Net improvement of water quality across the region.*

That provision has been operative since 1 October 2000 and is beyond challenge. Clearly geothermal discharges to freshwater do not achieve that objective.

[241] Much of the evidence focused on effects on the Waikato River but the policy covers all waterbodies in the region that can be affected by geothermal discharges. Of importance the following exchange took place between Mr Milne [counsel for the Regional Council] and Dr Timperly [an aquatic chemist called by Contact] during cross-examination.

> *Q. There is absolutely no good environmental purpose served by discharge [sic] arsenic, boron, sulphide or mercury into surface water in the Waikato Region, is there?*
>
> *A. There is no environmental benefit correct.*
>
> . . .

> *Q.* *Now, given that we have those contaminants I have just listed to you already in a geothermal system, beneath the ground, would it not be preferable from even an environmental point of view to reinject those contaminants back into the ground from whence they came so that you are not then contaminating either the surface water that I've put to you or the air that you put to me as an alternative receiving environment?*
>
> *A.* *Yes in terms of the water environment that would be quite correct and any increase in concentration of any of those substances, is a step in the wrong direction environmentally speaking. The extent of that step, and how serious it is of course is dependent on the magnitude of step.*

[242] We agree with the conclusions of Dr Timperly. Having regard to Objective 3.4.5 Water Quality of the Operative Regional Policy Statement and the evidence of the composition of geothermal water and its possible effects on groundwater, we consider that best practice is to reinject the fluid into the geothermal system from whence it came.

Sub-issue 5: costs of reinjection

[27] The evidence here related in particular to the cost to Contact if required to retrofit its Wairakei plant and the cost of reinjection to downstream (cascade) users of geothermal water from Contact's Wairakei plant. The present appeal raises questions relating to three cascade users, The Wairakei Prawn Farm, The Wairakei Terraces Facility operated by a company called Netcor, and an artificial steam flow down the Te Kiriohineki Stream. The appellant now argues the Environment Court failed to have regard to relevant evidence concerning these cascade users. After reference to evidence concerning the cost of retrofitting the Wairakei plant and the cost to cascade users of reinjecting geothermal water, the Environment Court said:

> *[253] We treat the costs as indicative and find that the cost of retrofitting the power plant and requiring reinjection is going to be high* **and may result in the demise of one or more cascade user.** *This is one of the factors which we must have regard to, and put into the crucible, to weigh with the other factors we have discussed, including our finding that costs resulting from*

> *subsidence may also be potentially high. We also recognise the heavy burden that would be imposed on any person or body, during the resource consent process or enforcement process, required to establish the cause and mitigation of future subsidence and damage that may arise therefrom.*
>
> (emphasis added)

The Environment Court's interim decision evaluation of the reinjection issue

[28] The Court's evaluation commenced with a summary of some, but not all, of the factual findings, and addressed alternative considerations, and concluded:

> *[263] In order to signal the importance of a discharge strategy, that has at its focus the avoidance or mitigation of adverse effects, we consider that any discharge by way of reinjection and/or injection in accordance with Policy Six as amended should be a discretionary activity. Any other discharge by way of reinjection and/or injection not in accordance with Policy Six should be a non-complying activity.*

The second main issue

[29] The second main policy issue concerned management of the geothermal system and whether there should be provision for more than one large-scale operator for each system. It is unnecessary to consider this part of the interim decision.

The interim decision: subsidiary issue

[30] The subsidiary issue is relevant. The issue as formulated by the Court was

> *. . . whether the regional policy should provide for discharges of geothermal water to ground or surface water to be prescribed in the geothermal module or the water module of the proposed plan.*

[31] The Court's discussion commenced:

> *[328] We have already discussed the accepted fact that geothermal water contains heat and contaminants and the effects of discharging geothermal water to ground and surface water. We found that it is best practice to reinject the geothermal water left over after production.*

> *[329] Contact and Mighty River Power endeavoured to persuade us that the discharge of geothermal water to ground or surface water should be treated no different from other discharges. Other discharges are provided for in the Water Module of the plan and require consent as discretionary activities.*

[32] The Court referred to a further part of Contact's argument and the position advanced for Waikato Regional Council. It then expressed conclusions which come to the heart of the second hearing, final decision, and this appeal:

> *[332] The essence of the argument for Contact was that discharges to surface waters should be treated as a discretionary activity rather than noncomplying, in that the effect of having the non-complying rule with the current policies is effectively making such discharges prohibited. Mr Robinson had this to say:*
>
> > *In my submission Policy 10 is not currently written in a way which gives a consent applicant for a non-complying activity any leeway because it . . . does not make clear that the policy of discouragement is not intended to operate when the preferred option of in-system reinjection is not appropriate.*
>
> *[333] **We consider that in this case the non-complying status is appropriate for large surface discharges of geothermal water, both because of the nature and size of the discharges involved, and because of the interlocked nature of the effects of the take and the discharge. Simply the effects of the take, the effect of discharging and the effect of not reinjecting are all relevant and inter-linked.** This is further complicated where the applicant for discharge may be different from the person extracting the fluid. For these reasons we consider that the discharge of geothermal water to ground or surface water should be treated differently from other discharges and should remain in the Geothermal Module. (emphasis added)*
>
> *[334] An **allied matter is the threshold** for non-complying surface discharges. We were not convinced that the level of 15000 t/day discharge to surface water as the threshold level where an activity changed from discretionary to non-complying, as proposed by Environment Waikato, in the Variation, had any compelling basis. Nor were we convinced by Taupo District Council's proposed 1000 t/day (albeit for the Wairakei/Tauhara System). Both of these figures appeared to us to be somewhat arbitrary, and*

> *an appropriate threshold should be established by the application of relevant resource management principles. While this is not a matter for determination in this decision we consider that these preliminary views may be helpful. (emphasis added)*

[33] Having regard, in particular, to the emphasised passages above, what remained in essence for the second hearing and final decision was fixing the figures for the threshold; the dividing line between discharges treated as a discretionary activity and "large" discharges required to be assessed under the more onerous non-complying classification. The policy mandate that "large surface discharges of geothermal water" be non-complying activities has not been challenged.

The second hearing and final decision

[34] At the commencement of the final decision the Court, after noting the two main issues determined in the interim decision, repeated an observation from the interim decision of importance on this appeal:

> *[3] While these issues were the focus of attention during a lengthy hearing, they could not and were not isolated from the other provisions of the Change and Variation. Accordingly the evidence at times addressed the other provisions to enable the issues of focus to be seen in context. Likewise, in our interim decision we of necessity addressed some of those outstanding issues in the context of the issues we had to determine.*

[35] The Court noted that, following mediation between the parties after the interim decision, only two issues remained for determination. One of those was the 15,000 tpd threshold between discretionary and non-complying status. The rule as it then stood in the regional plan remained with that volumetric threshold of 15,000 tpd, and without any annual cap.

[36] In its preliminary discussion of this issue the Environment Court referred to the interim decision and said:

> *[7] We observed that in our view the 15,000 tpd limit appeared arbitrary. We also commented that the Taupo District Council proposal of 1,000 tpd also seemed arbitrary.* ***As we did not hear direct evidence on the matter,*** *and it was not one of the matters that we had to rule on, we did not make a definitive ruling. We did observe that an appropriate threshold limit should be established by the application of relevant resource management principles.* ***Having now heard detailed evidence*** *on the matter we are in a position to make a determination. (emphasis added)*

[37] Based on the arguments for the parties at the second hearing, the Court was faced with three options in relation to the threshold:

(a) A threshold based on the daily volume of discharge. The noncomplying activity threshold of 15,000 tonnes per day proposed by Waikato Regional Council, was ultimately accepted by Taupo District Council and was supported by Mighty River Power.

(b) A threshold based on the daily volume of discharge with an annual cap. The main proponent of an annual cap was Taupo District Council which sought an annual cap of 350,000 tonnes, as against 5.5 million tonnes if the daily limit of 15,000 was simply converted to an annual figure.

(c) A threshold based on the quality of the receiving water. This was Contact's argument.

[38] The Court discussed the further evidence and submissions under four headings. Those headings are adopted for the purpose of the summary of the Court's discussion and findings which follows.

The need to regulate and accommodate in an appropriate way activities for which it is impracticable to require reinjection/injection

[39] The Environment Court's discussion under this heading in considerable measure addressed what are now the first and fourth grounds of Contact's appeal.

[40] The Court firstly recorded the position of the parties and the evidence in support of their contentions. The position adopted at that stage by the Regional Council was, in the event, accepted by the Court (see [50] below). For this reason it is appropriate to set out the Regional Council's position as summarised by the Court:

> *[18] Environment Waikato sought that the plan reflect the now strengthened reinjection/injection policy of the Change to the regional policy statement, by having a non-complying activity rule for activities contrary to that policy. This is a direct result of our interim decision, where we considered that the 12 June 2004 policy did not sufficiently signal the importance or significance of*

reinjection/injection as a means of avoiding surface contamination or avoiding or mitigating subsidence. We wanted the policy strengthened. This has now been done, says Environment Waikato, and the plan Variation supports this.

[19] Environment Waikato has also taken a pragmatic view in setting the rule framework for minor and medium takes and discharges in which:

(i) Minor takes and discharges of geothermal water up to 30 tonnes per day are permitted activities provided the discharge does not enter any fresh surface water body (rule 7.6.1.2).

(ii) Medium sized takes and discharges up to 6,000 tonnes per day are restricted discretionary activities, again provided there is no discharge into any fresh water body (rule 7.6.1.3).

(iii) All other takes of geothermal water are discretionary activities (rule 7.6.1.4).

(iv) All other discharges of geothermal water up to 15,000 tpd are discretionary (rule 7.6.1.7).

(v) Anything else is non-complying (rule 7.6.1.8).

Only the discretionary activity rule is in contention.

[41] The Court referred to evidence in support of the Regional Council's position. This included evidence in respect of activities for which it was said to be impracticable *or* inappropriate to require reinjection or injection. These included the Te Keriohineki Stream (which in turn incorporates the Netcor facility) and the Wairakei Prawn Farm whose position had already been considered in the interim decision (see [27] above). The evidence as to current discharge for these Cascade users was under 15,000 tpd but in excess of 2.5 million tpy. Evidence relating to well testing was discussed. The Court's summary was as follows:

[22] In addition, at this resumed hearing, Dr Malcolm Grant identified well testing as an activity for which reinjection will not always be a practicable option and which is of a temporary nature. Dr Grant also identified that well testing will have a typical discharge rate of approximately 8,040 tpd and could be accommodated within a discharge rate of 15,000 tpd. Dr Grant also considered that a limit of 1,000 tpd would be inadequate for

> *well testing. Dr Grant was supported by Mr Bloomer, a geotechnical engineering specialist called by Might River Power.*

[42] There was reference to contrary evidence given by a consultant planner called by Contact, Mr Chrisp. From the summary in the final decision it is clear that the Court was there expressly turning its mind to matters that are now raised on this appeal. For example:

> *[23] Mr Marshall's and the Environment Waikato's view was criticised by Mr Chrisp, a consultant planner called by Contact, who considered that any numerical threshold was arbitrary and that the 15,000 tpd threshold was* "picking winners and is not effects based".
>
> . . .
>
> *[25] Mr Chrisp's evidence was that any volumetric discharge threshold was arbitrary and could not be justified on the basis of either resource management principles, or the requirements of section 32.*

[43] The Court stated its conclusion under this first heading as follows:

> *[30] In setting the discretionary activity limit for surface discharge of geothermal water, we see some merit in the practical approach taken by Environment Waikato. While there is a degree of arbitrariness, it does appropriately accommodate activities, such as well drilling, for which it is impracticable to require reinjection/injection. We also see some merit in the idea of imposing a cap as put forward by Mr Lawless and supported by Mr Tremaine. In this regard, Mr Tremaine accepted in response to questions from the Court, that there was a logical inconsistency between the restricted discretionary rule for discharges to land which allowed for discharge to land of up to 6,000 tpd with no capped limit.*

It is relevant to note in relation to Contact's fourth ground of appeal that the conclusion here was solely in respect of activities in respect of which the Environment Court concluded it was impracticable to require reinjection or injection, not also activities for which reinjection or injection might be considered inappropriate. The evidence referred to at [41] above covered both.

The effect on the reservoir

[44] The Court noted that it had heard a considerable amount of evidence on this topic at the first hearing and that it did not intend to repeat

it. Further evidence at the second hearing was discussed with the following conclusion:

> *[35] We accept, that while the possibility of subsidence is not of itself a sufficient basis for determining the threshold or activity status, it is nevertheless an important factor for us to bear in mind, along with the other possible benefits and detriments of reinjection/injection.*

The quality of the receiving waters and the effects on receiving waters and the Maori culture

[45] On the question of the quality of the receiving waters the Court noted the evidence and the complexity of the issue. Its overall finding was that the evidence of two water quality scientists, one called for the Waikato Regional Council and the other for Contact, "did not provide any assistance in choosing between the Contact proposal for a threshold based on the quality of the receiving waters and the alternatives".

[46] In respect of Maori culture and other interests the Court referred to the evidence from two witnesses. It noted in particular their evidence that ". . . geothermal water extracted for large scale energy projects should be returned to the same system from where it came".

The adequacy of a s 32 analysis

[47] The Environment Court's discussion under this heading was directed to what is now, in large measure, Contact's third ground of appeal.

[48] The Environment Court noted the evidence of an economist called for Contact, Mr Donnelly, to the effect that the reference in s 32 to efficiency requires an economic analysis and that the references to costs and benefits require quantification — a marginal cost and benefit analysis is required to determine economic efficiency. The evidence of Mr Donnelly was questioned by evidence from Professor Meister, an economist called on behalf of the Waikato Regional Council.

[49] The Court noted that "the differences of opinion between the two economists stems from the respective boundaries of each applied to the discipline of economics". There was reference to two Environment Court decisions expressing different views on the scope of s 32: *Marlborough Ridge Ltd v Marlborough District Council* [1998] NZRMA 73 (proposing an approach based on strict economic theory of efficiency) and *St Lukes Group Ltd v North Shore District Council* [2001] NZRMA 412 (advocating a "more holistic approach").

[50] Importantly, the Court also said, following its summary of the evidence of the economists and reference to those cases:

> *In any event, we accept Environment Waikato's proposition that the rule reflects the strong reinjection/injection policy (among others) that we directed in our interim decision. During that hearing we heard an exhaustive amount of evidence on the benefits and costs of reinjection/injection.*

The proposition of the Regional Council accepted by the Court is the proposition set out above at [40]. The Court then set out paras [137] and [138] of the interim decision. These paragraphs, which deal with the principal benefits and risks identified by the Court are reproduced above at [24].

[51] The final decision continued:

> *[47] We heard exhaustive evidence on many related matters including such matters as: the potential economic costs of reinjection; the estimated economic costs of subsidence; the potential costs to cascade users; estimates of future differential subsidence; and social costs. We are satisfied that we are able to make a balanced and informed judgment having regard to the provisions of the Act including section 32.*
>
> *[48] While acknowledging the usefulness of a marginal cost benefit analysis, we also consider that a section 32 analysis requires a wider exercise of judgment in determining whether or not a rule is the most appropriate method of achieving the objectives of the plan and the purpose of the Act. We have regard to the economic evidence in this context.*

Environment Court conclusions

[52] The Court's conclusions, so far as material, were as follows:

> *[50] To an extent we agree with Mr Chrisp's evidence to the effect that any volumetric cap is going to be arbitrary and is not going to recognise the relative volumes and conditions of either the discharge or the receiving waters. However we do not find that a threshold based on the quality of the receiving water, as proposed by Contact, is any less arbitrary. It may be that due to this arbitrariness, the evidence of the two water quality scientists who gave evidence, Dr Kim and Dr Timperley, did not provide any assistance in choosing between the three options.*

> *[51] We do not consider that the receiving water quality threshold is appropriate. . . .*
>
> *[52] The approach proposed by Taupo District Council of setting an annual volumetric cap has the advantage of allowing the volumes of discharge to land that are required for the short-term activities such as well drilling and testing where it would be unduly restrictive to require reinjection of the waste. However, we consider that the 350,000 tpy threshold is both too restrictive and is inconsistent with rule 7.6.1.3. For this reason we consider that a threshold of 2.5 million tpy for discharge to land is an appropriate and consistent threshold.*
>
> *[53] . . . [This dealt with assessment criteria, which are not relevant.].*
>
> *[54] With the addition of that ninth assessment criterion we consider that most discharges to surface water can be adequately assessed under the discretionary activity rule framework. We also have regard to the strengthened policies. [sic] We also have regard to the strengthened policies favouring reinjection/injection of geothermal fluid. We do find however, that large volume discharge(s) do have the potential to create adverse effects on the receiving environments and should be considered within the restricted decision framework of non-complying activities.*

The Environment Court consents decision

[53] As recorded at [14] above, the same Environment Court panel upheld the grant to Contact of consent to discharge 60,000 tpd of geothermal water and 35,000 tpd of geothermal condensate into streams running into the Waikato River. The following may be noted, in addition to what is discussed at [8]:

(a) The assessment of Contact's consent application was as a noncomplying activity.

(b) The consent covers the cascade users: the Wairakei Prawn Farm, the Te Kiriohineki Stream and the Netcor facility.

(c) In its original written submission, Contact emphasised that the noncomplying status for discharges over 15,000 tpd was of material significance for Contact and for Contact's cascade users. The submission was advanced before the consents were confirmed by the Environment Court. As a consequence Contact

acknowledged that it could no longer make the point in respect of its existing operations. Although the non-complying status will apply to any new operation, the practical significance of the rule would appear to be considerably diminished.

(d) The consents now held are effective until 2026. The Regional Council is required to review its regional plan no later than every 10 years. This means that despite any decision reached on the discharge thresholds, Contact will retain the right to discharge at this higher volume until the consents expire. Principles on appeals from the Environment Court

[54] An appeal to this Court from the Environment Court is limited to an appeal on a point of law: Resource Management Act 1991, s 299(1). In his submissions for Contact, Mr Robinson referred to well known authorities as to the limits this should place on appellants and does place on this Court. I will come to these. But there are additional constraints on this Court on an appeal from the Environment Court because of its specialist expertise and experience. These require emphasis. There is also need to note relevant principles as to the extent to which a specialist court in its decision needs to record factual findings and other decision making processes when dealing with complex subjects and very large volumes of evidence.

Question of law

[55] The limits of an appeal from the then Planning Tribunal on a point of law were stated by a full bench of the High Court in *Countdown Properties (Northlands) Ltd v Dunedin City Council* (1994) NZRMA 145 at 153 as follows:

> [T]his Court will interfere with decisions of the Tribunal only if it considers that the Tribunal:
>
> - applied a wrong legal test; or
> - came to a conclusion without evidence or one to which, on evidence, it could not reasonably have come; or
> - took into account matters which it should not have taken into account; or
> - failed to take into account matters which it should have taken into account.
>
> See *Manukau City v Trustees of Mangere Lawn Cemetery* (1991)

15 NZTPA 58, 60.

[56] To determine whether a point of law arises in one or more of these ways requires an assessment of what underlies the decision under appeal. It also requires an assessment of the methods adopted in reaching the decision, indicated by express statements of the Tribunal, or reasonable inferences as to how this occurred, and consideration of the specialist expertise of the Tribunal.

[57] An appeal, such as the present one, based in considerable measure on the contention that the Environment Court's conclusion is one it could not reasonably have come to on the evidence, requires careful scrutiny. The question of whether the Tribunal's conclusion is one to which it could not reasonably have come is not determined by asking whether it is a reasonable outcome. "Reasonable" refers to the quality of the reasoning, not the quality of the result. The task of this Court is to decide whether the decision "was one that could be arrived at by rational process": *Stark v Auckland Regional Council* [1994] 3 NZLR 614 at 617 per Blanchard J.

[58] The careful scrutiny required of points of law of this nature was discussed by Fisher J in *NZ Suncern Construction Ltd v Auckland City Council* [1997] NZRMA 419 at 426 as follows:

> *[T]he Court should resist attempts by litigants disappointed before the . . . Environment Court to use appeals to this Court as an occasion for revisiting resource management merits under the guise of questions of law:* Sean Investments v Mackellar *(1981) 38 ALR 363;* Parkinson v Waimairi District Council *(1988) 13 NZTPA 244 at 245. This includes attempts to re-examine the mere weight which the Tribunal gave to various conflicting considerations before it:* Manukau City Council v Trustees of Mangere Lawn Cemetery *(1991) 15 NZTPA 58, 60.*

[59] If an error of law is detected it will not warrant relief on appeal unless this Court is satisfied that the error materially affected the decision of the Environment Court: *Royal Forest and Bird Protection Society Inc v W A Habgood Ltd* (1987) 12 NZTPA 76, 81-82; *Countdown Properties* at 153.

The Environment Court's expertise and experience

[60] Section 248 of the RMA provides that the members of the Environment Court shall be Environment Judges and Environment Commissioners. Section 253 deals with eligibility for appointment as an Environment Commissioner. Regard must be had "to the need to ensure that

the Court possesses a mix of knowledge and experience in matters coming before the Court, including knowledge and experience" in a wide range of relevant disciplines and interests. The expertise of the Court in this case was noted at [13] above.

[61] Section 265 of the RMA, so far as material, provides that "the quorum for the Environment Court is one Environment Judge and one Environment Commissioner sitting together". In this case, the quorum was one Environment Judge and three Environment Commissioners.

[62] These provisions are the statutory underpinning for the deference required to be shown by this Court to the expertise and experience of the members of the Environment Court. In *Westfield (NZ) Ltd v Hamilton City Council* [2004] NZRMA 556, Fisher J said at 562, [17]:

> *In these matters the Environment Court should be treated with special respect in its approach to matters lying within its particular areas of expertise: see* Environmental Defence Society Inc v Mangonui County Council *(1987) 12 NZTPA 349 at 353. As Harrison J recently pointed out in* McGregor v Rodney District Council*, Parliament has circumscribed rights of appeal from the Environment Court for the obvious reason that the Judges of that Court are better equipped to address the merits of their determinations on subjects within their particular sphere of expertise.*

[63] In *Green and McCahill Properties Ltd v Auckland Regional Council* [1997] NZRMA 519, Salmon J said at 528:

> *No question of law arises from the expression by the Environment Court of its view on a matter of opinion within its specialist expertise:* J Rattray & Son Ltd v Christchurch City Council *(1983) 9 NZTPA 385. The Environment Court's special expertise and experience enable it to reach conclusions based on the sound judgment of its members, without needing or being able to relate them to specific findings of fact. This is particularly so in cases of planning discretion:* Lynley Buildings Ltd v Auckland City Council *(1984) 10 NZTPA 145 and* EDS v Mangonui County Council *(1987) 12 NZTPA 349.*
>
> *Mr Bartlett for the appellants warned against the danger of accepting an Environment Court decision just because it was an expert Tribunal. It would, of course, be inappropriate to do so. Its expertise cannot save decisions which do not meet the principles set out above. However, it is important to bear in mind*

> *that the Court is required constantly to make decisions relating to planning practice, it is constantly required to assess and make decisions relating to conflicting expert opinion. Members of the Court are able to contribute to the formation of a judgment as a result of experience gained in other professional disciplines. These considerations and the fact that the Court is constantly exposed to litigation arising from the application of the Resource Management Act, justifies the respect which this Court and the Court of Appeal has customarily accorded its decisions.*

Recording factual findings and other decision making processes

[64] Appeals purportedly on points of law not infrequently turn into a contention that the Tribunal did not refer in its decision to a matter of fact or of law in issue in the hearing. That, of itself, is not an error of law. This includes, for example, an absence of reference in the decision to evidence which may be in direct conflict with a conclusion expressly recorded, or evidence given at the hearing which might arguably indicate a conclusion different from that recorded by the Tribunal.

[65] There is no obligation to record every finding on every piece of evidence. There is no obligation to make a finding of fact on every fact in issue, and generally speaking there is no obligation to make a finding of fact at all: see *Rodney District Council v Gould and Anor* (2006) NZRMA 217; *Auckland City Council v Wotherspoon* [1990] 1 NZLR 76 at 82-89. There is also no obligation on a Tribunal to record every part of its reasoning process on the facts or on the law, and notwithstanding the fact that the conclusions reached may involve unarticulated rejections of contentions of witnesses or submissions for parties on the law.

[66] Considerations of this nature are of general application and, at least in some respects, were expressly acknowledged by the Environment Court. These considerations have added emphasis when an expert Tribunal such as the Environment Court in this case had to deal with a complex subject, a large volume of evidence, a large number of witnesses, and many of those witnesses being experts in a range of fields, with a range of diverse opinions expressed in each field.

[67] These considerations overlap with the appeal principles considered above in relation to the expertise and experience of the Environment Court. There are two other and also overlapping considerations. The first is that the Environment Court may "receive anything in evidence that it considers appropriate to receive": RMA s 276(1)(a). The second is that, although an appeal to the Environment Court involves a hearing de novo,

the Environment Court is entitled to have regard to, and to give such weight as it considers appropriate to, the evidence accumulated and conclusions reached in the formulation and settlement of the scheme and plan by the territorial authority.

First appeal ground : daily and annual volume thresholds arbitrary

[68] Contact's summary of its first ground is at [3] above. In my judgment there was no error of law by the Court as contended for.

A need for an "effects-based rationale"?

[69] An essential premise of the submission for Contact is that the single rule — stipulating the volumetric limits — in the Regional Council's entire regional plan for the geothermal system, had to have an effects-based rationale. This is based on the RMA's general focus on the management of the effects of activities on the environment rather than the management of activities per se. It was put on this basis in written submission: In the absence of any effects-based rationale for the rule threshold adopted it is submitted that the Court's conclusion may accurately be characterised as "arbitrary" as indeed the Court appeared to accept.

[70] The RMA does not stipulate that every rule must have an effects-based rationale. For this reason alone much of the thrust of the first ground of appeal is lost. The directly relevant provisions of the RMA, moving from the most specific to the most general, are discussed in the following paragraphs.

[71] Section 68(3):

> *In making a rule, the regional council shall have regard to the actual or potential effect on the environment of activities, including, in particular, any adverse effect.*

The Regional Council, and therefore the Environment Court on an appeal, must have regard to effects on the environment, and any adverse effects in particular. This does not mean the rule must have an effects-based rationale.

[72] Section 68(3) is in any event part only of the statutory direction to Regional Councils as to how they should go about formulating regional plans. Section 63(1) provides:

> *The purpose of the preparation, implementation, and administration of regional plans is to assist a regional council to carry out any of its functions in order to achieve the purpose of this Act.*

[73] If a rule can be said to have an underlying rationale, it is what is stipulated in s 63(1). This takes the analysis to its most general — s 5 which sets out the purpose of the RMA:

> *(1) The purpose of this Act is to promote the sustainable management of natural and physical resources.*
>
> *(2) In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while—*
>
> *(a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
>
> *(b) Safeguarding the life-supporting capacity of air, water, soil, and ecocystems; and*
>
> *(c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

Plainly this requires consideration of a great deal more than effects on the environment, let alone effects on "the receiving environment" as it was put in submissions for Contact.

Environment Court consideration of effects

[74] In my judgment, the Environment Court was not required to identify an "effects-based rationale" for the rule, and it did meet the statutory obligation to the extent required by s 68(3). As the final decision itself indicates, this had been done in considerable measure in the interim decision. This may be seen in the extracts from the interim decision set out above. Central to this is the conclusion at paragraph [333] of the interim decision, recorded at [32] above. The Court had already decided, as a matter of policy, that "the non-complying status is appropriate for large surface discharges of geothermal water". The primary task of the Court in the final decision was to determine the figures for the daily and annual limits (as well as reconsidering and rejecting Contact's renewed argument that all surface discharges should be treated as discretionary activities).

[75] Contact, in its submissions, did not contend that the Court ignored the statutory provisions; it was acknowledged that the Court "was of course well aware of all of these matters". Contact referred to "categories of effects on the environment" that the Court did consider in its final submission.

The submission, based on Contact's interpretation of the Court's conclusions, was that "the Court identified no evidential basis for the discretionary rule threshold which it adopted based on effects on the [receiving] environment". Hence, it was submitted, the conclusion was arbitrary. This submission is not borne out by consideration of the points made for Contact in support of it.

[76] It was submitted that the Court impliedly accepted — or at least there was "no clear finding" against — Contact's contention that the alternatives to discharge to ground or to surface water were, in terms of effects, either adverse or neutral. The alternatives were reinjection, where the effects were said to be "negative from a production perspective", or injection, where the effects were said to be neutral. This submission cannot stand on its merits as to the broad thrust of the Court's conclusions in the interim decision: see for example the passages quoted at [24]. Nor would the submission assist Contact if there was some basis for the proposition that the Court "impliedly accepted" Contact's contentions. The Court could have, for example, concluded that the effects of reinjection were negative from a production perspective, but nevertheless concluded overall that reinjection was, in general, preferable to discharge to land or surface waters. This is neither irrational nor unreasonable.

[77] Contact submitted that the Court appeared to have accepted Contact's argument that the relationship between subsidence and reinjection meant that these considerations could not assist in setting the volumetric threshold. This does not assist Contact because it is not an accurate summary of the Court's conclusion: see para [35] of the final decision recorded at [44] above. The conclusion was that subsidence was an important but was not, on its own, a sufficient, basis for determining a threshold.

[78] Contact further submitted that the conclusion in the final decision on effects on water quality meant that the Court was unable to draw any effects-based conclusions in this regard. The submission here was founded on a single sentence — the first sentence in para [50] of the final decision. Paragraph [50] of the final decision is fully set out at [52] above. The Court there referred to both the Regional Council's and Contact's approaches having, in effect, degrees of arbitrariness. Contact sought to argue from this that the Court itself was effectively concluding that both approaches were equally arbitrary. A reading of the full paragraph indicates that this is not so. A reading of both the interim and the final decisions makes clear beyond any reasonable argument that, once the Court had concluded the second hearing, it was quite satisfied that the relative "arbitrariness" of the

volumetric cap was not a problem. Against that, no assistance was available, in determining the scope of the rule, by looking at the water quality effects.

[79] In respect of evidence on Maori cultural issues, the submission was that the Court did not draw any evidential support from it on the threshold issue. That is no more than a submission that the Court did not expressly refer back to the evidence it clearly recorded in the body of the final decision when expressing its final conclusion. It cannot support an argument of an error of law.

[80] Mr Robinson did acknowledge that a numerical limit adopted as "a reasonable compromise" from a range of limits might not be open to attack as an unreasoned conclusion, if "technically supportable on the basis of adverse environment effects". The concluding proviso relating to environmental effects has already been dealt with. The development of the submission directed to a reasoned conclusion was in part an argument that there was no adequate explanation for the Court's adoption of the 15,000 tpd limit. Standing alone, that would not indicate an error of law. A consideration of the final decision in its entirety, and set against the interim decision, makes it clear there was no error of law.

[81] The final aspect of this ground of appeal was an absence of evidence for the particular figure of 15,000 tpd. This is not borne out by consideration of the final decision and the evidence at the second hearing as itemised in submissions for the Taupo District Council, in particular, and for the Regional Council. The whole point of the second hearing was to deal directly with the numbers — a volumetric threshold on a daily basis and an annual basis if appropriate — or the alternative advanced by Contact (as well as the second issue on which there has been no appeal). The Court in its final decision at [21]-[25] summarised a body of evidence dealing with different arguments about 15,000 tonnes per day and other figures, including annual figures. The Environment Court said it was satisfied that it could come to a conclusion based on detailed evidence. There is nothing to indicate that the expressed confidence of the Court was in any way misplaced, let alone misplaced to an extent indicating an error of law. This is sufficiently borne out by the passages from the final decision recorded in the earlier section of this judgment. Some further points may nevertheless be noted in respect of Contact's first, and one of its principle, grounds of appeal.

[82] The first is that, in a practical sense, what the Environment Court had to decide in its final decision was how large is "large". The Court had already concluded, as a matter of policy, that any "large surface discharges of geothermal water" should be non-complying activities. When the second

hearing commenced, there was no longer any argument concerning any of the rules apart from the 15,000 tpd rule. Amongst other things, there was no challenge in the Environment Court to rule 7.6.1.3 which, in effect, treated 6,000 tpd as a "medium sized" discharge. Standing alone, this would have provided a rational starting point from which the Environment Court could conclude that 15,000 tpd was a large discharge.

[83] In any event there was evidence. Mr Green, counsel for the Taupo District Council, produced in an appendix to his submission, copies of the pages from the second hearing transcript of evidence and submissions from counsel dealing with the range of evidence and arguments over both the daily and the annual figures. It was for the Environment Court to weigh this and come to a conclusion. It is not open to review on an appeal on a point of law.

Second appeal ground: an alternative rule threshold should have been considered

[84] The Court in its final decision rejected Contact's argument that the rule threshold should be based on the quality of the receiving water. Contact's notice of appeal included an appeal against that finding, but this was abandoned.

[85] This led to an argument on appeal presented as a composite ground, but which contains two strands. The first strand is that the Court's rejection of the Contact approach did not give any "greater cogency or appropriateness" to the alternative approach advanced by the Regional Council (and supported by Taupo District Council and Mighty River Power). It was submitted that to hold otherwise would have put an onus on Contact to persuade the Environment Court not to accept the approach propounded by the other parties. It is correct that there was no particular onus on Contact, or any other party, except in relation to the propositions it was seeking to advance. But there is no indication of an error of law by the Environment Court in this regard. And in relation to the approach contended for by the Regional Council and others, the Court preferred that approach on its own merits, for reasons already discussed.

[86] The second strand of this ground turns on whether Contact's first ground is sustained. The point was made for Contact as follows:

> *If the High Court confirms the Appellant's principal contention, it is submitted that there must now be a real question as to whether it is even possible to come up with a valid and reasonable basis for volumetric rule threshold. That would clearly be a question the Environment Court would have to consider.*

It was submitted that because the Environment Court did "not go down this track". This also represents an error of law.

[87] Because the appeal on the first ground has not been upheld, this related submission must also fail. But it would have failed even if the first ground of appeal had been upheld. The only error of law that could arise on this hypothesis would be an error in the reasoning of the Environment Court. There is no appealable error of reasoning by failing to explore possible options not before a Court when one of the options before the Court is accepted.

Third appeal ground: failure to assess costs and benefits under s 32

[88] Section 32 of the Act relevantly provides:

> ***32. Consideration of alternatives, benefits, and costs***
>
> *(1) In achieving the purpose of this Act, before a proposed plan, proposed policy statement, change, or variation is publicly notified . . . an evaluation must be carried out by—*
>
> *. . .*
>
> *(c) the local authority, for a policy statement or a plan . . .*
>
> *. . .*
>
> *(2) . . .*
>
> *(3) An evaluation must examine—*
>
> *(a) the extent to which each objective is the most appropriate way to achieve the purpose of this Act; and*
>
> *(b) whether, having regard to their efficiency and effectiveness, the policies, rules, or other methods are the most appropriate for achieving the objectives.*
>
> *(3A) . . .*
>
> *(4) For the purposes of the examinations referred to in subsections (3) and (3A), an evaluation must take into account—*

> *(a) the benefits and costs of policies, rules, or other methods; and*
>
> *(b) the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods.*

[89] Contact submitted that:

(a) Section 32(4)(a) required the Regional Council, and therefore the Environment Court, to take into account the benefits and costs of the proposed rule in respect of the daily limit and the annual cap.

(b) There was no evidence, at the first hearing or the second hearing, to enable the Environment Court to undertake this assessment.

(c) There was, in consequence, an error of law.

[90] Contact did not argue that the Environment Court failed to have regard to s 32(4)(a), or any other provision of s 32. Nor could it: as recorded above there was a whole section of the final decision under the heading "the adequacy of a s 32 analysis" ([47]-[51] above).

[91] As to the second consideration — was there any evidence on benefits and costs relating to the thresholds — Mr Robinson acknowledged in the course of his oral submissions to me that the evidence was there. But, he submitted, there was an error of law because the Environment Court did not articulate its analysis. It simply said it was relying on the great body of evidence of costs and benefits without articulating a process of reasoning leading to acceptance of the Regional Council's threshold of 15,000 tonnes per day and the annual cap of 2.5 tonnes.

[92] With the submission refined in this way, it becomes clear that there is no error of law. There is no error of law by failing to articulate all of the reasoning provided it is clear that the Court turned its mind to the relevant statutory provisions and had evidence to justify a conclusion: *Takamore Trustees v Kapiti Coast District Council* [2003] 3 NZLR 496, 513-514. The depth of reasoning that must be expressed will vary depending on the subject matter, but here it is clear that the Court, faced with conflicting expert opinions, made its decision based on the evidence it heard and its own expertise. The survey earlier in this judgment of relevant parts of both decisions and in particular [47]-[48] makes this abundantly clear. And there was no error of law by the Environment Court's not setting out in its final

decision a detailed analysis, as might be undertaken by an economist, carefully recording and weighing costs and benefits of a rule stipulating a threshold of 15,000 tpd as opposed to a rule stipulating some other figure. Analysis at that level of detail is not required by s 32; it was certainly not required in this case having regard to the full extent of the entire inquiry and decision making process.

Fourth appeal ground: annual cap: "arbitrary" and relevant matters ignored.

[93] As indicated in the heading there were, in essence, alternative grounds for Contact's submission that there was an error of law in fixing the annual cap of 2.5 million tonnes.

Annual cap: "arbitrary"

[94] Contact submitted that there was "no evidential basis" for the figure of 2.5 million tpy, and that the Court "provided no logical reason why it was appropriate". No error of law, in either respect, is apparent.

[95] The selection of an annual cap figure of 2.5 million tonnes can be seen from the final decision to be not merely a "reasonable" conclusion, but an entirely logical one. The Court had made a decision to allow for short term surface discharges such as well drilling and testing. Those could be accommodated within the daily cap of 15,000 tonnes, but required an annual cap less than that figure multiplied by 365 days. An annual cap less than 365 x 15,000 was required because the primary objective was to limit the volume of larger discharges to land or surface water, and the activities to be accommodated, such as well testing, generally did not have to be carried out continuously over a full year. The unchallenged rule 7.6.1.3 permitted daily discharges of 6,000 tonnes as a (less onerous) restricted discretionary activity (see [19] of the final decision recorded at [40] above). The lower threshold of 6,000 tpd, and one defined in the rule as "medium" equates to 2.19 million tpy. A rounding up to 2.5 million tonnes to accommodate short term surface discharges such as well drilling, and a rounding up by an expert tribunal such as this, is a perfectly logical approach.

[96] In addition, as noted in the submissions for the Taupo District Council, there was evidence directed to various calculations for an annual cap. There was no need for the Environment Court to set this out in its decision. For present purposes it is necessary for me to refer only to evidence from Mr Bloomer, a geotechnical engineer called by Mighty River Power (and whose evidence on the daily threshold was expressly referred to in the decision). Mr Bloomer referred to a range of possibilities depending upon a range of variables. None of this requires elaboration save that his

figures, translated to an annual discharge from well testing, ranged from substantially below 2.5 million tonnes per annum to 8,000 tonnes per day "for the best part of a year". The "best part of a year" was not defined by Mr Bloomer, but output at 8,000 tonnes per day for 312 days would fit the Environment Court's cap of 2.5 million tonnes per annum.

Annual cap: failure to have regard to relevant considerations

[97] An annual cap of 2.5 million tonnes converts to a daily limit of 6,850 tonnes. There was evidence in the second hearing that three cascade users of the discharge from Contact's Wairakei power plant in turn discharged daily volumes in excess of 6,850 tonnes. In relation to this evidence Contact submitted:

(a) The Environment Court failed to consider that the annual cap of 2.5 million tonnes would not accommodate these cascade users.

(b) The Court, it was argued, had "impliedly agreed" with a submission for the Regional Council that provision should be made for the activities of the cascade users, but there was a failure to do so.

[98] This ground must also fail because of the essential premise on which the Court's decision on the daily threshold and annual cap was based. The part of the final decision most relevant to the present question is the first part dealt with under the heading: "The need to regulate and accommodate in an appropriate way activities for which it is impracticable to require reinjection/injection" (see paras [39]-[43] above). The activities identified by the Court for which it was *impracticable* to require reinjection/injection were well drilling and testing. The activities of the cascade users were identified but were not recorded as within this category of "impracticability".

[99] It is correct, as Contact submitted, that there was evidence (called by the Regional Council) that cascade users were in a category where it was "impracticable *or* inappropriate to require reinjection/injection" (see para [41] above). It was entirely open to the Environment Court to decide that those users for whom it was inappropriate to require reinjection or injection were nevertheless not to be accommodated and that the downstream users fell within that category. But an omission in the final decision to record these conclusions is not an error of law. What is more, it seems possible that the Environment Court was satisfied that it was not inappropriate to require one or more of the cascade users to reinject or inject. In the interim decision, the Court recognised that reinjection "may

result in the demise of one or more cascade user" (see [27] above). This is sufficient to demonstrate that there was no error of law by the Court.

[100] A further point was made for Contact relating to specific evidence as to the daily discharge from some of the cascade users. In particular, there was reference to evidence that the discharge from the Wairakei Prawn Farm might be in the region of 14,400-21,000 tpd. There was a fair amount of debate on this topic in the submissions before me. With respect to counsel, this debate simply served to highlight that in reality the argument was one relating to a point of fact, not a point of law. I was taken to passages in the transcript of proceedings before the Environment Court indicating that the Court was well aware of the range of figures. And it is not to be overlooked that, before the final decision was made, the Environment Court in dealing with the rule, and its onerous non-complying classification, was aware that Contact and its downstream users already had consents. In any event, the rate of daily discharge for all of the Cascade users which the Court did record, was in excess of 2.5 million tonnes if converted to an annual figure. The simple arithmetical consequence of the Court's decision to fix the cap at 2.5 tpa was to put the cascade users in excess of it. There was no error of law.

Result

[101] The appeal is dismissed.

[102] The respondent and Taupo District Council are entitled to costs. If the parties are unable to agree on costs, memoranda for the respondent and Taupo District Council should be filed by 15 February 2008 and a memorandum for Contact by 14 March 2008.