



STAFF REPORT

TO: Environment & Planning Subcommittee

FROM: Neil Tyson - Consent Planner

REFERENCE: RM070044

SUBJECT: **B R REILLY, J M REILLY, D A EARLE and G R MILNES - REPORT EP07/11/13 - Report prepared for 26 and 27 November hearing**

1. INTRODUCTION

Application Number RM070044 – Water permit

To take groundwater both for potable supply to a proposed café-restaurant-motels and water for a freshwater aquarium complex.

2. BACKGROUND AND CONSENTS APPLIED FOR AND AMENDED

The applicant's initial application was to take groundwater from an existing 4.8 metre deep, stock water well (WWD 23395), at rates up to 10.53 litres per second for the proposed café-restaurant-aquarium-motels complex. Of this volume, nine cubic metres (9,000 litres) per day was for potable supply to the proposed café-restaurant/motels and the remaining was for the proposed aquarium up to a total of 910 cubic metres per day. The application stated that this volume of water is the maximum demand particularly as the aquarium size depends on the approval of DoC and Ministry of Fisheries to obtain and keep the various species of NZ native fish.

The initial application contained only limited information on the yield of the existing well. Further information relating to its sustainable yield was requested in the Council letter (28 March 2007). When supplying this requested information, the applicant discovered that a maximum of two litres per second was available from the existing well. The well pump test and water quality data was supplied in the applicant's further information response (20 June 2007).

The applicant also identified that the existing well required a resource consent for its original construction and they advised Council of an amendment and applied for retrospective consent "...to the extent necessary.." for this well's construction. In fact, the existing well complied with all except on of the stated matters for a *permitted* activity under PTRMP Rule 16.12.2. The exception was that it was closer than 20 metre from the bank of the Waikoropupu River.

The application's other amendment was for consent to drill a new larger and deeper bore as the water supply source, specifically to address the limited supply available from the existing stock well.

What appears to be a Council (staff) omission, lead to the above amendment relating to the proposed new bore not being picked up by the appropriate staff at that (pre-

notification) time. Furthermore, this amendment to the application did not appear in the formal public notice, but was clearly part of the amended application and documentation and is referred to by various submitters.

The amendment did not come to the writer's attention until Friday 9 November at which time the applicant's David Smythe was contacted. It was mutually agreed that landuse consent RM071074 could be granted, which it was on 13 November 2007. The aim was to allow for the drilling and testing of the new bore prior to the hearing date. The details for this new bore are 200mm diameter and a depth of 10 metres with a stainless steel wedgewire screen set to intercept any gravel water bearing aquifer at the site. The bore location is five metres from the existing stock well. At the time of writing this report, this new bore had not been drilled or tested so no results were available.

The application RM070044 was publicly notified as the taking of 910 cubic metres per day of groundwater, and the documentation was clear it was from both the existing well and also the proposed bore. The writer is of the view that the Hearing Committee can therefore grant up to this maximum rate. However, the writer's recommendation is based on the available information from the existing bore and the result is a much reduced allocation of 1.7 litres per second, which is well short of the stated 10.5 litres per second. It is understood that 1.7 litres per second would seriously jeopardise the proposed complex.

3. RELEVANT SUBMISSIONS

Various submitters including Robert C Piekarski (Submitter #40) considers the water demand of 910 m³/day of groundwater to be excessive and that it should be based on actual needs and be monitored for the (35 year) duration of the consent and that Council have a right of review to reduce allocated rates to actual needs. Golden Bay Futures Inc Society object to the 35 year term as being unrealistic and excessive, particularly during times of drought.

Alan Vaughan (#33) also states that the proposed taking of groundwater is unwise as the applicant has not determined if there are likely to be adverse effect on the nearby Waikoropupu Springs.

Submission 38 is concerned about the building platforms being raised to height 7.2m, and that this level is just 0.5 m above the 1983 flood level and not the maximum possible. Others oppose the use (loss) of productive soil.

Nelson –Marlborough Health Board advise that the information relating to the potability of the proposed water source is uncertain and incomplete as a new bore was proposed and this needs to be clarified.

Regarding the proposed fire-fighting supply, the N.Z. Fire Service Commission submits that the current proposal does not satisfy the standard required in the current code of practise and will need to be modified.

Submitter John Lee raises various issues relating particularly to the Council's information (or lack of) on the Takaka Catchment's water resources and states that without such information Council cannot make informed decisions on any further allocation of water.

4. ASSESSMENT

4.1 Statutory Setting

Section 14 of the Resource Management Act 1991 states that no person may take, use, dam, or divert any water unless expressly allowed by a rule in a regional plan, any relevant proposed regional plan or a resource consent.

Council has a regional water plan covering all Tasman District, including Takaka. Part V of the Proposed Tasman Resource Management Plan (PTRMP) is not yet fully operative but it is considered that any remaining appeals do not apply to this application.

Under Rule 31.1.2 of the PTRMP, landowners may take up to 5 cubic metres per property per day of water from the Takaka Zone as a *permitted* activity. The applicant's proposed taking and use of groundwater exceeds this amount and, as a new activity, the application falls for consideration under Rule 31.1.6 as a *restricted discretionary* activity.

Pursuant to the Act, when considering this application Council shall have regard to the matters outlined in Section 104 of the Act and particularly the relevant provisions of the following planning documents:

- (a) the Tasman Regional Policy Statement (TRPS); and
- (b) the proposed Tasman Resource Management Plan (PTRMP).

Most of the objectives and policies contained within the TRPS are mirrored in the PTRMP and the activity is considered to be consistent with the relevant objectives and policies contained in Chapters 30 and 31 of the PTRMP.

4.2 Proposed Tasman Resource Management Plan (PTRMP)

There are few specific rules in the PTRMP relating to Takaka and no allocation limits are currently stated. Therefore, as identified in the Assessment of Environmental Effects (AEE), the application is considered as a *restricted discretionary* activity in the PTRMP and it may be granted subject to conditions or declined by Council under Rule 31.1.6 PTRMP. The writer's assessment is that the stated standards and terms under Rule 31.1.6 are fully complied with. Therefore, if consent is granted conditions of consent are required to fall within the stated matters under Rule 31.1.6(1)-(14) PTRMP of which the following are considered applicable:

1. The quantity, rate and timing of the take not otherwise specified above, including rates of take, rostering or rationing steps required to implement condition (e) and any other requirements to maintain any minimum flow given in Schedule 31.1C.
2. The location of the point of take or yield of any bore, including taking into account required spacing between bores (*see Schedule 16.12A*) and aquifer characteristics such as depth, permeability, yields required, and yields available in existing adjacent bores.
3. The need for backflow prevention for any take from groundwater.

4. Effects on other water users.
5. Information to be supplied and monitoring requirements.
6. Measures to achieve efficient water use or water conservation, including sealing of artesian bores, preparation of property water management plans, and measures to monitor water use.
7. Except as provided in (c) above, the duration of the consent as provided for in Schedule 31.1A (Section 123 of the Act), timing of reviews, and the purposes of reviews (Section 128 of the Act).
8. Financial contributions, bonds and covenants in respect of the performance of conditions and administration charges (Section 108 of the Act).

4.3 Principal Issues (Actual and Potential Effects on the Environment)

The principle issues associated with the proposed activity relate to the following actual and potential effects on the environment:

- (a) any effects of the proposed taking at the site on other users or the environment and that the proposed taking is likely to comply with future allocation limits for the water management zone;
- (b) that the rate of take from either bore, including taking into account spacing between bores, aquifer characteristics such as depth and permeability, is available and sustainable.
- (c) ongoing monitoring of the use of water, ensuring that water taken is and continues to be used efficiently and monitoring actual effects on the environment.

4.4 Actual and Potential Effects (Relating to Water take)

(a) Bore Pump Test

As discussed above, the well pump test and AEE by Envirolink indicates a maximum sustainable rate significantly less than the proposed maximum of 10.53 litres per second.

Problems were also experienced during the pump test which, when coupled with well construction, supports a conservative interpretation of the test results. For this reason, if the Hearing Committee is in a mind to grant consent the maximum recommended rate for RM07044 is six cubic metres per hour (ie approx 1.7 litres per second), which provides 1.56 litres per second (135 cubic metres per day) for aquarium use.

If the applicant is able to show that the new bore is capable of supplying groundwater at a higher rate then this could be allocated up to 10.5 L/s (910 m³/day).

In the applicant's AEE, they advise that the main long-term recharge source for the existing stock water well is likely to be the adjacent Waikoropupu River. Their AEE advises that if 100% of the recharge is from the river then the maximum take rate of 10.5 litres per second equates to 2% of the lowest flow ever recorded for the Waikoropupu (Pupu) Springs, which is 5.2 cumecs (5,200 litres per second). In anticipation of the applicant drilling and testing a new bore, it is appropriate to consider these effects.

(b) Effects on Waikoropupu River

The application is to take groundwater and not from the river. However, given the proximity of the applicant's well (and proposed bore) to the river, then (river) depletion effects should be assessed for the applicant's worst case scenario of 100% (well) recharge from the Waikoropupu River. The cumulative effect of the proposed take plus other existing river water users can be determined from the Council's own consent information.

The only other consented take from the Waikoropupu River is RM070697 for irrigation of the on the adjacent (upstream) Cerny property, which is allocated 4.6 litres per second for irrigation of eight hectares. Combined with the recommended rate of 1.7 litres per second, the total demand from the river is (4.6 + 1.7) 6.3 litres per second and this is (6.3/5,200) 0.12% of the lowest flow recorded for the Waikoropupu (Pupu) Springs based on the applicant's data. Furthermore, for the applicant's 10.53 litres per second, the total demand would be 15.1 litres per second and this is (15.1/5,200) 0.29% of the lowest flow recorded for the Waikoropupu (Pupu) Springs.

The following are Council's data (supplied by Joseph Thomas) for the Waikoropupu Springs:

Waikoropupu (Pupu) Springs	l/s
Minimum	5609
Mean	10033
Median	10041
1:5 yr 7 day	6587
1:10 yr 7 day	6247
MALF 7 day	7586

Therefore, assuming a worst case scenario of 100% recharge from the Waikoropupu River, and the application granted in full, the allocation would comply with the guideline under Policy 30.1.11 PTRMP being substantially less than 10 percent of the five year, seven day low flow.

The AEE also advises that 95% of the 10.53 litres per second proposed to be taken will be discharged via the relocated ephemeral streams back to the Waikoropupu River within about 100 metres of the (groundwater) take point. Therefore, any adverse effects on the river resulting from stream depletion effects will occur just for this 100 metre stretch of river and, under these circumstances, any effects are likely to be less than minor or even de minimis. The exception may be at very low flow.

One submitter (Alan Vaughan) was concerned that the proposed taking of groundwater is unwise as the applicant had not determined if there are likely to be adverse effect on the nearby Waikoropupu Springs. Council staff's assessment is that there will be no affect on the Springs if this application is granted.

Note: The consented discharge rate significantly reduces to 1.56 litres per second if consent RM070044 just authorises the sustainable pumping rate from the existing well. The effects of the discharge are separately assessed under RM070046.

(c) Monitoring

The applicant volunteers (see AEE 103(i) &(ii)) water meter installation to monitor the take with a meter accuracy +/-10% and weekly meter readings forwarded to Council monthly. However, Council's definition for water meters as stated in the PTRMP requires +/-5% meter accuracy and this is easily achievable and recommended. With regard to the frequency of returns, fortnightly returns during summer months is the Council standard and this should be adopted here. Winter month returns can be of lesser frequency, even six monthly. All readings should be weekly.

With regard to the number and placement of water meters and taking account of the volunteered discharge monitoring meters, it is recommended that two water meters be installed to monitor separately water taken for potable supply versus for aquarium use. This "potable" use data will be most useful for monitoring and water efficiency reasons because it is this water which is potentially consumed. In contrast, the aquarium water is taken and discharged at the same volume and need be metered at only one location, and probably not at the (volunteered) discharge.

The other related matter concerns the proposed new bore. If this is drilled and tested and is demonstrated to be a satisfactory supply for both the (proposed) potable supply and the aquarium use then the applicant should decide if one or both wells are to be used. Council's standard is to require a separate resource consent for each pump and a separate water meter. The exception is where the two (or more) pumps feed into a single pipeline.

(d) Pump Noise

The environment can be adversely affected for recreational users etc by pump noise and the location of structures. In this case, there is an existing electric powered pump in the existing well and it is assumed an electric powered pump would be installed for the new bore if it is successful. It is unclear if any additional pump will be a submersible or centrifugal model until the bore is drilled and tested. If pump noise is an issue it can be minimised by lining of the existing pump shed.

(e) Water Quality

With regard to the Nelson –Marlborough Health Board submission, the water quality information appears to confirm the potability of the proposed water source based on the existing well but is clearly uncertain with regards to the (yet to be drilled and tested) new bore. The test results indicate a possible need for lime treatment to "soften" the water for washing purposes.

It is relevant, that the existing shallow well is unlikely to be a secure water source during flood events owing to its level and well construction. A drilled deeper bore screened at depth is likely to be significantly more secure but any additional comments are reserved until the new bore is drilled and tested.

5. TERM OF CONSENT

The applicant advises that the take (water permit) and the discharge permits are inextricably linked and they are seeking a 35 year term for both. However, the stated common expiry date for Takaka catchment (take) water permits in Schedule 31.1A PTRMP is 31 May 2019.

The applicant states they require certainty of operation and “.. not continual applications for resource consent to renew permits”. They argue that water supply is not a problem in this particular area and that the proximity of the river should ensure continuous supply. The applicant states that the Council must give reasons to justify a shorter term.

Common expiry dates, in this case 31 May 2019, are adopted throughout Tasman District and apply to the Council’s own consented reticulated community water schemes. To suggest that the applicant requires more certainty than a Council scheme is nonsense particularly given the proposed use of water. Common expiry dates and the length of term, reflect Council’s confidence in the understanding of the water resource including uses and values. In Takaka, Council’s understanding is incomplete and the Waimea Plains experience is surely sufficient evidence that a lot can change in 10 years even where Council has a good understanding of the resource.

Replacement consents are also *controlled* activities under the PTRMP, which gives sufficient certainty to consent holders.

Finally, the applicant advises they are prepared to volunteer a condition that the aquarium be commenced within 10 years of the restaurant’s completion and any consent would therefore need to include an extended lapse period. The writer only comments that 10 years plus seems an excessively long period to reserve water for the proposed use.

Neil Tyson
Consent Planner



(DRAFT) RESOURCE CONSENT DECISION

Resource Consent Number: RM070044

Pursuant to Section 104B of the Resource Management Act 1991 (“the Act”), the Tasman District Council (“the Council”) hereby grants resource consent to:

B R Reilly

(hereinafter referred to as “the Consent Holder”)

Activity authorised by this consent: Take groundwater for café and aquarium use.

Location details:

Address of property: Pupu Valley Road
Valuation number: 1870008300

Pursuant to Section 108 of the Act, RM070044 is granted for a term expiring on **31 May 2019** and subject to the following conditions:

CONDITIONS

Site and Take Details

- Legal Description of Irrigated Land: Lot 1 DP 358848
Category of Water Source: Takaka River Gravel Aquifer
Zone and Catchment: Takaka
Maximum rates of take authorised: 6 cubic metres per hour
147 cubic metres per day
1,029 cubic metres per week
Well number: WWD 23395
Location Co-ordinates: Easting: 2492257 Northing: 6040839 (New Zealand Map Grid Datum).

Water Meter Specifications, Maintenance and Readings

- The Consent Holder or their agent shall, at their own expense, install, operate and maintain two water meters to record all water taken under this consent with separate meters for aquarium use and for uses other than aquarium use and the meters shall comply with the Council’s *Water Meter Specifications* as stated in the Tasman Resource Management Plan and, furthermore, the meters shall be installed in accordance with the meter manufacturer’s specifications.

3. The Consent Holder is required to record and supply to Council a complete record of their taking of water required under Condition2 accurate to plus or minus five percent and at no time shall usage exceed the rates authorised by this consent. The Consent Holder shall, as a minimum, record weekly water meter readings during every November to April inclusive and supply these readings to Council on a fortnightly basis during this period provided that Council reserves the right to require weekly water meter returns if it considers it appropriate given the severity of the drought event.
4. The Consent Holder shall pay the reasonable costs associated with the monitoring of this consent including, if and when requested by Council, the full costs associated with water meter calibration to confirm meter accuracy provided that calibration is not more frequent than five yearly.
5. The Consent Holder shall only install and operate electric driven pumps for the taking of all water pursuant to this consent and all practical effort shall be made to avoid pump noise outside of pump shed.
6. Council may, for the duration of this consent and within the three month period following the anniversary of its granting each year, review the conditions of the consent pursuant to Section 128 of the Resource Management Act 1991 for the purposes of:
 - (a) dealing with any unexpected adverse effect on the environment, including but not limited to pump noise, that may arise from the exercise of the consent and which is appropriate to deal with at a later stage; and
 - (b) to reduce the quantities and rates of water authorised to be taken if the consent is not fully exercised or to reflect the sustainable yield of the bore; and
 - (c) when relevant national environmental standards have been made under Section 43 of the Resource Management Act 1991; and
 - (d) to comply with the requirements of a relevant operative rule in the Proposed Tasman Resource Management Plan or its successor, including maximum or minimum levels or flows or rates of use of water including water rationing, or water metering requirements; and
7. The Consent Holder shall keep such other records as may be reasonably required by the Council and shall, if so requested, supply this information to the Council. If it is necessary to install measuring devices including a water meter to enable satisfactory records to be kept, the Consent Holder shall, at his or her own expense, install, operate and maintain suitable devices.
8. The Consent Holder shall reduce the quantities and rates authorised by this consent if the aquarium complex is not commenced within five years of the café-restaurant's completion.
9. This resource consent may be cancelled upon not less than three months' notice in writing by the consent authority if the resource consent remains unexercised without good reason for any continuous period exceeding five years.

ADVICE NOTE

1. This resource consent only authorises the activity described above. Any matters or activities not referred to in this consent or covered by the conditions must either: 1) comply with all the criteria of a relevant permitted activity rule in the Proposed Tasman Resource Management Plan (PTRMP); 2) be allowed by the Resource Management Act; or 3) be authorised by a separate resource consent.