

STAFF REPORT

TO: Environment and Planning Committee

FROM: Neil Tyson, Consent Planner - Water

REFERENCE: RM070583

SUBJECT: Sebastien Vineyard Ltd – REPORT EP08/02/05 - Report prepared

for 1 February 2008 Hearing.

1. APPLICATION BRIEF

This report covers RM070587 relating to the variation of water permit NN980029 to take and use groundwater for potable domestic use, in addition to irrigation and filling of storage. This report also covers the proposed stormwater discharge RM070585 resulting from the Sebastien Vineyard Ltd subdivision application and minor variations to consents NN990305 and NN990308 relating to irrigation from the two existing dams.

2. LOCATION AND LEGAL DESCRIPTION

There are two irrigation dams on the property plus an existing 150 metre deep bore. There are also three shallow wells which will be unused.

The applicant proposes to provide a potable water supply for the subdivision from the existing bore which is currently authorised (see NN980029) for irrigation use and for filling storage. The application is also to legitimise the supply of groundwater from the bore to an existing camping ground and a neighbouring school.

APPLICATION REFERENCE: RM070585

SUBJECT: Sebastien Vineyard Ltd – Consent to Discharge Stormwater

THE PROPOSAL

The proposal is to discharge stormwater from the proposed subdivision. The applicant's consultant Cameron, Gibson & Wells Ltd calculate that the overall runoff from the property as a result of development will increase by 3% compared to the existing landuses.

Definitions

"Stormwater" is defined in Chapter 2 PTRMP and, under this definition, is required to be collected so as to concentrate the flow at some point before discharge.

Rules

Rule 36.4.2 of the Proposed Tasman Resource Management Plan (PTRMP) regulates the discharge or diversion of stormwater or drainage water into water, or onto land within the various zones in the Tasman district. However, the Rural 3 Zone is excluded under both the *permitted* activity rule and the *controlled* activity Rule 36.4.3A and accordingly, consent is required for a *discretionary* activity to discharge stormwater from all new points of concentrated stormwater discharge including proposed culverts, down pipes from dwellings etc within the subdivision.

Objectives and Policies

The following objectives and policies from the PTRMP are considered to be generally relevant to this application to discharge stormwater:

Objective 33.3.0 states:

The discharge of stormwater so that:

- (a) there is no increase in risk of damage caused by flooding or associated channel damage arising from increased stormwater flows in any urban or rural catchment as a result of urban or rural-residential development;
- (b) the contamination effects of stormwater flows in streams and the coastal marine area, especially in those receiving water bodies with significant natural character or habitat value for plants and animals are avoided, remedied or mitigated;
- (c) stream habitat values are retained, and where practicable, enhanced or established in drainage catchments consistent with the efficient passage of increased stormwater flows, as a result of urban or rural-residential development and channel modification;
- (d) the effects of increased stormwater flows and contaminating discharges are avoided, remedied or mitigated by the development of stormwater collection and disposal systems to service urban or rural-residential development.

Furthermore, the following policies are relevant:

- 33.3.1 To require all owners, particularly the Council as Stormwater Asset Manager, of all or part of any stormwater network to avoid, remedy or mitigate adverse effects of stormwater discharges.
- 33.3.2 To advocate works to restore and protect stream or coastal habitats and improve and protect water quality affected by stormwater and drainage water discharges.
- 33.3.3 To avoid, remedy or mitigate the adverse effects of stormwater and drainage water discharges, including:
 - (a) the effects of contaminants such as sediments in stormwater or drainage water on receiving environments;

- (b) the cumulative effects of toxic contaminants in stormwater, particularly in the coastal marine area;
- (c) the flooding and erosion effects of stormwater discharges

PRINCIPAL ISSUE

From the application, the two existing water storage dams (Council Dam ID's 103 and 101) are not being altered and the catchment area for each is unchanged. Cameron, Gibson & Wells Ltd calculate that the overall runoff from the property as a result of development will increase by 3% compared to the existing landuses and that most of this increase will be directed to the two dams.

The proposed (3%) increase in runoff is small and any effects on flooding etc is likely to be de minimis. However, it is not actually stated by the applicant's consultant that the existing dam spillways have sufficient capacity to cater for the increase. This question was addressed to the applicant's Mr Mark Lile on 14 January 2008 but, at the time of writing, there had been no reply. This report is therefore based on the assumption that the spillways have adequate existing capacity and that no change to the spillways are required. Importantly, there are no buildings proposed below the two dams.

RECOMMENDED CONDITIONS

The conditions appended to this recommendation will ensure that the stormwater management systems are designed and implemented in accordance with the application should consent be granted by the Committee.

- 1. The discharge of stormwater shall be undertaken in general accordance with the information supplied with the application.
- 2. The discharge of stormwater shall not cause in the receiving water any of the following:
 - (a) the production of any visible oil or grease films, scums or foams, or conspicuous floatable or suspended material;
 - (b) any emission of objectionable odour;
 - (c) the rendering of freshwater unsuitable for bathing;
 - (d) the rendering of freshwater unsuitable for consumption by farm animals; and
 - (e) any adverse effect on aquatic life.
- The discharge of stormwater shall not result in adverse scouring or sedimentation of any watercourse, or of the two dams. Detention structures or similar shall be constructed to remedy any scouring or erosion that is occurring.
- 4. Sediment controls shall be implemented and maintained in effective operational order at all times.

- 5. Any discharge of stormwater shall not aggravate flooding on adjoining properties not owned by the consent holder.
- 6. The Consent Holder shall advise Council's Co-ordinator Compliance Monitoring when construction of roading, access, and building platforms commences to enable monitoring of the effectiveness of stormwater, sediment and erosion controls to be carried out. The cost of monitoring and any subsequent remedial actions shall be borne by the Consent Holder.
- 7. Council may, for the duration of this consent and within three months following the anniversary of its granting each year, review the conditions of the consent pursuant to Section 128 of the Resource Management Act 1991, to:
 - (a) deal with any unexpected adverse effect on the environment which may arise from the exercise of the consent; or
 - (b) to require compliance with operative rules in the Tasman Resource Management Plan or its successor plan; or
 - (c) when relevant national environmental standards have been made under Section 43 of the RMA; or
 - (d) to require changes to the dam spillways to ensure their safety and operation.

NOTATIONS

- 1. The applicant shall meet the requirements of Council with respect to all Building Bylaws, Regulations and Acts.
- 2. Access by the Council's Officers or its Agents to the property is reserved pursuant to Section 332 of the Resource Management Act 1991.
- 3. Monitoring of this resource consent is required under Section 35 and 36 of the Resource Management Act 1991. Monitoring costs are able to be minimised by consistently complying with the resource consent conditions.
- 4. Council draws your attention to the provisions of the Historic Places Act 1993. In the event of discovering an archaeological find during the earthworks (e.g. shell, midden, hangi or ovens, garden soils, pit depressions, occupation evidence, burials, taonga, etc.) you are required under the Historic Places Act, 1993 to cease the works immediately until, or unless, authority is obtained from the New Zealand Historic Places Trust under Section 14 of the Historic Places Act 1993.

DURATION OF CONSENT

If consent is granted it should be for a 35 year period, being the maximum allowable under the RMA. APPLICATION REFERENCE: RM070587

SUBJECT: Sebastien Vineyard Ltd – Water Permit Change of Use Application

and

Minor variations to consents NN990305 & NN990308 relating to irrigation from the two existing dams.

THE PROPOSAL

The applicant property lies within the Rural 3 zone which Council intends in its LTCCP to service with water on a staged and programmed basis. Council water reticulation will be available at the applicant's boundary in due course, but is not available to service this application and will not be for some years.

The applicant's water permit application RM070587 is to take up to 146.4 cubic metres of groundwater per day from an existing bore for irrigation, filling of existing dams, and to provide potable water (up to 36 cubic metres per day) for a homestead, the subdivision application described above (application RM070583), and an adjacent school, church, and residential dwelling. If this change in use application is granted, RM070587 shall replace water permit NN980029.

The application states (see Landmark Lile Ltd application Section 2.3.8) that a term of 35 years is sought for the water permit RM070587, although an unchanged term to that of NN980029 is recommended by the writer.

The applicant states that their allocation under NN980029 restricted under Condition 3 to 24,595 cubic metres is more than adequate for the proposed water demand and for future growth of the camping ground. The applicant advises that irrigation will continue to draw on dam storage and the bore can be used to top up storage if and when required.

The application property has two water storage dams (Council Dam ID's 103 and 101) and two current water permit consents NN990308 and NN990305 are held for irrigation from each. The writer's understanding is that the application does not involve any alteration to the dam structures or their individual catchment areas. Regarding NN990308 and NN990305, if subdivision is approved there is a need to change the consent conditions to the extent of updating the legal description and property valuation details. It is recommended that this updating be required as a condition of the subdivision consent as per the following:

NN990308 AND NN990305 - CHANGE OF CONDITIONS

Prior to the issuing of the 224 certificate the Consent Holder shall obtain from the Council a change of conditions of consents NN990308 and NN990305 to the extent of changing the legal descriptions and property valuations for both consents regarding the irrigated land and the dam locations (ie post subdivision).

ASSESSMENT - CHANGE OF USE APPLICATION

BACKGROUND

The applicant's existing bore WWD 8034 was drilled around 1992 to a depth of 150 metres for irrigation and dam storage augmentation. A standard step test was performed on the bore to determine its sustainable (100 day) yield, which is required for irrigation bores in this Moutere Eastern Groundwater Zone. Under consent NN980029, Woods Orchard are granted consent to take 6.1 cubic metres per hour, 146.4 cubic metres per day and 1,024.8 cubic metres per week. As stated above, Condition 3 restricts annual use to 24,595 cubic metres.

According to Council's records, Woods Orchard's two water dams hold, when full, a total of 32,000 cubic metres ((dam 103) 23,000 cubic metres + (dam 101) 9,000 cubic metres), dam 101 being the dam immediately adjacent to the bore. In average to low rainfall/runoff years, the individual catchment areas ((dam 103) 11 hectares + (dam 101) 8 hectares) and run-off are insufficient to fill dam storage. In particular, dam 103 with its larger storage is unlikely to fill and larger volumes of bore water will be used particularly in these years to top up storage.

PRINCIPAL ISSUE

The principal issue relating to this application (ie for a change in water use) is the annual allocated rate and, as discussed below, the writer is recommending a reduced annual allocation under RM070587 of 19,676 cubic metres.

As stated previously, the original allocation granted in 1993 reflected the sustainable yield available from the bore derived from the 100 day pumping rate. This allocation approach was typical for applications that were solely for irrigation use. The taking to fill storage was also authorised and, in recognition of this use, the annual amount was restricted to 24,595 cubic metres. Water permits solely for irrigation do not have an annual total.

Importantly, there are very few Moutere dams that are filled (or topped up) from groundwater bores. In some cases, groundwater is pumped to storage for the purpose of aeration treatment, as the Moutere groundwater typically has a high level of naturally occurring dissolved iron.

Also important is that, in 1993, neither Rural 3 or the growth in use of the Moutere groundwater for community and domestic supply was envisaged. The proposed change of use from irrigation has important implications for the long term management of the aquifer.

The application property lies in the new Coastal Zone, which is one of three new zones which replace the original Moutere Eastern Groundwater Zone. According to Council's information, the Coastal Zone receives less rainfall recharge than the other two new zones. In addition, historic water use records from the Coastal Zone shows that actual use complies with, or is less than, the 100 day rate for all consents in this zone. Council's information does not support an increase in the allocation limit for this zone when it notifies the new rules.

Given the above, it is important that Council take a conservative approach to allocation to avoid adverse effects on water storage levels in the aquifer, which relies on rainfall recharge. Change of use from seasonal irrigation to year round community supply potentially threatens the sustainable long term management of the groundwater in the zone.

Council's Resource Scientist – Water (Joseph Thomas) assesses that a reduced annual allocation of 19,676 cubic metres per annum from the applicant's bore WWD 8034 would be consistent with a sustainable long term management approach for the aquifer and the applicant's proposed change in use.

PROPOSED TASMAN RESOURCE MANAGEMENT PLAN ("PTRMP") RULES AFFECTED

The application is potentially a *restricted discretionary* activity under Rule 31.1.6 as no increase in allocation is proposed and the allocation limit in Figure 31.1F is unaffected. However, it is unclear if the standards and terms under Rule 31.1.6(b) are complied with in this case as there may be Maori lease lands that have no allocation in this zone.

Therefore, the application can be alternatively considered as a change of conditions (relating to the change in use of water) pursuant to Section 127(3)(a) of the RMAct, and this is a *discretionary* activity under the Act. As a *discretionary* activity the Committee may, under section 104B RMA, decline the application or grant it subject to conditions under Section 108 RMA, including any conditions which the Council may consider appropriate.

RELEVANT STATUTORY PROVISIONS

In considering the application, the Committee shall have regard to the matters outlined in Section 104 of the Act. In particular, 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. A review of the PTRMP objectives and policies relevant to the application finds the proposal is consistent with the relevant objectives and policies contained in Chapter 30 PTRMP. The exception in the writer's opinion, relates just to the proposed allocation. Therefore from Chapter 30 PTRMP:

- 30.1.7 To manage the allocation of water taken from water bodies so that the cumulative effect of water takes does not exceed:
 - (a) the stated flow or water level regime
 - (b) any allocation limit for that water body;
 - (c) the sustainable yield of the aquifer;

provided that harvesting water during times of high flow may be considered, if adverse effects can be avoided, remedied or mitigated

Investigations and Monitoring

30.1.28 To continue investigations and monitoring of the water resources of the District, with the aim of establishing and maintaining defensible allocation limits and management policies to ensure sustainable management of the resource.

And

- 30.2.7 To regularly review rates of water use specified on water permits, including those that are deemed permits under Section 386 of the Act, to ensure that levels, flows, rates or standards established for any water body or management zone will be met
- 30.2.8 To set a common expiry date for water permits to take water in each water management zone, to ensure consistent and efficient management of the resource.

As a *discretionary* activity, the Committee may grant consent subject to conditions under Section 108 RMA, including any conditions which the Council may consider appropriate. Any new or changed conditions should however be restricted to those matters actually affected by the proposed change. The following from Rule 31.1.6 PTRMP are also considered relevant:

Firstly, the standards and terms state:

(a) The total amount taken, either by itself or in combination with other authorised water takes in the relevant water management zone does not exceed the total allocation limit for the relevant zone as shown in Figure 31.1F.

Importantly, from Figure 31.1F allocation limits are for the summer period November to April and do not account for water demand outside this period. Furthermore, it now appears that the allocation limit stated in the PTRMP at least for the two Moutere groundwater zones do not properly account for rainfall recharged aquifers, changing patterns of use and potentially increasing demand.

With regard to stated matters, the Committee is entitled to reduce an allocation where a bona fide review shows that water use is less than the amount of water allocated and to reflect the sustainable yield of the bore.

ASSESSMENT OF EFFECTS

(i) Bona fide

Woods Orchard were assessed in 1998 to be a bona fide user. At that time, the property was in orchard and fully irrigated and the allocated rates appeared reasonable for that landuse. The orchard is now removed and grapes are proposed, but other irrigated crops may well be planted in future.

A review of actual usage from the bore since 1994 shows annual usage varying between a low of 2,500 cubic metres in the season 1995-96 to a high the following summer of approximately 20,000 cubic metres (ie 1996-97). Average use for the 10 years 1994 to 2005 was approximately 11,000 cubic metres per annum.

(ii) Effects of Change

The proposed change in *use* will result in year-round demand and use of water, compared to just (summer) irrigation *use*. Regarding this increased demand, TDC Resource Scientist Water Joseph Thomas has (re)assessed the sustainable yield of the bore. Mr Thomas who is a recognised expert in this field states:

The interference drawdown calculations shows that changing from 100 days demand to 365 days at a distance of 500 metres, increases the interference drawdown by approximately 1.5m. Hence, if this is used as a further decrease (this being conservative) in the pumped bore the yield would be lower than the 6.1 m3/hour provided by the step pump test. Considering the regional fluctuations in the deep aquifer of about 0.5 metre (summer to winter), I would suggest that a decrease in the long term pumping rate by 0.5 m3/hour would compensate for the additional drawdown. Hence a pumping rate of 5.5 m3/hr would be more conservative for as a 365 day pumping rate.

Mr Thomas' recommendation is that the applicant retain their pumping rate of 6.1 cubic metres per hour and their maximum daily rate of 146.4 cubic metres per day but that a reduced annual allocation of 19,676 cubic metres per annum be adopted as this is consistent with a sustainable long term management approach for this groundwater zone.

A reduced annual allocation of 19,676 cubic metres per annum recognises the historic maximum annual use (ie 20,000 cubic metres) and is reasonably generous in the writer's opinion.

Mr Thomas confirms that the existing bore is screen from 40 metres below ground level. Mr Thomas is available should the Hearing Committee wish to question him regarding any technical evidence concerning the bore and bore yield.

OTHER MATTERS

As identified by NMDHB, consent conditions should be imposed to require chlorination treatment and for the Scheme to be registered as a "Community Drinking Water Supply".

TERM OF CONSENT

The application seeks a term of 35 years for the water permit RM070587. However, this is not supportable. Common (zone) expiry dates, in this case 31 May 2013, are adopted throughout Tasman District and apply to all other consents in this Moutere Eastern Groundwater Zone. Common expiry dates (and the length of term) reflect Council's confidence in the understanding of the water resource including uses and values.

Replacement consents are also *controlled* activities under the PTRMP, which gives sufficient certainty to consent holders. The application is also assessed as a change of conditions application of NN980029 and, as such, no change to the term of a consent is possible under the Act.

SUGGESTED CONDITIONS							
Should consent be granted by the Committee for the proposed Change of Conditions of RM070587 it is suggested that the attached draft consent form the basis of that consent:							

For a resource consent required under the Tasman Resource Management Plan (PTRMP) and Section 127 of the aforesaid Act and a decision under the provisions of Sections 104 of the same aforesaid Act.

DECISION

The application has been considered as per the requirements of Section 104 and Part II of the Resource Management Act (RMAct) 1991 and the Tasman District Council (Council) grants a change of conditions for an unchanged period expiring on **31 May 2013** and subject to the following conditions.

CONDITIONS

1. Site, Take and Use Details:

Location: The Coastal Highway, Tasman

Legal Description: Proposed subdivision of Lots 1-2 DP 349997

Lot 1 DP 19518 Lot 1 DP 15342 Lot 3 DP 304381 Lots 1 & 2 DP (as per property

valuation 1928079100)

Aguifer: Moutere Gravel Aguifer

Zone and Catchment: Eastern Groundwater Zone, Moutere Purpose and Use: Irrigation, storage and community supply

Maximum Area Irrigated: 30 hectares

Authorised Rates of Take:

Maximum instantaneous take:

Maximum daily rate:

Maximum weekly rate:

Maximum yearly rate:

6.1 cubic metres per hour

146.4 cubic metres per day

1,024.8 cubic metres per week

19,676 cubic metres per annum

Well Number: WWD 8034

Bore Location: E: 2514966 N: 6000661 (N Z Map Grid)

- 2. The Consent Holder or their agent shall, at their own expense, install and maintain a water meter that complies with the Council's *Water Meter Specifications* as stated in the Tasman Resource Management Plan and the meter's installation shall be in accordance with the meter manufacturer's specifications and shall be located such that it provides a complete record of the taking of groundwater under this consent.
- 3. The Consent Holder is required to keep a complete record of their taking of groundwater under this consent and the recorded data shall be accurate to plus or minus 5 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 and supply these readings to Council on a fortnightly basis (or such other period that Council considers is appropriate) during every November to April inclusive.

- 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 calibration of their water meter to confirm its accuracy provided that calibration is not more frequent than five yearly.
- 5. 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 additional measuring devices to enable satisfactory records to be kept, the Consent Holder shall, at his or her own expense, install, operate and maintain suitable devices.
- 6. The Council may, in the period 31 May to 31 August each year, review any or all of the conditions of the consent pursuant to Section 128 of the Resource Management Act 1991 for all or any of the following purposes:
 - to deal with any unexpected adverse effect on the environment which may arise from the exercise of the consent including matters which it is appropriate to deal with at a later stage; and/or
 - (b) to comply with requirements of an operative regional plan including any allocation limit, rationing or rostering restriction; and/or
 - (c) to comply with relevant national environmental standards made under Section 43 of the Resource Management Act 1991; and/or
 - (d) to require the adoption of the best practical option to remove or reduce any adverse effects on the environment; and/or
 - (e) to reduce the quantities of water authorised to be taken if the permit is not fully exercised.
- 7. This consent may be cancelled upon not less than three months notice in writing by the Council to the Consent Holder, if the consent remains unexercised without good reason for any continuous period exceeding five years or, in the event of an alternative Council reticulated water supply becoming available at the property boundary.
- 8. Suitable backflow prevention devices shall be installed to protect groundwater quality.
- 9. All water taken for household use shall be chlorinated and this treated groundwater shall be piped to each household, school and camping ground.
- 10. The Consent Holder shall be registered as a "Community Drinking Water Supply".
- 11. The yearly allocation in Condition 1 relates to the twelve month period from November to October (the following year) inclusive.

Advice Notice Access:

Access by the Council or its officers or agents to the land subject to this water permit is reserved pursuant to Section 332 of the Resource Management Act.

Advice Notice Monitoring: Pursuant to Section 36 of the Resource Management Act, 1991, the Consent Holder shall meet the reasonable costs associated with the monitoring of this consent.						