STAFF REPORT

TO: Environment & Planning Subcommittee

FROM: Neil Tyson, Consent Planner (Water)

REFERENCE: RM050605 (Water Permit) and RM050640 (Landuse Consent)

SUBJECT: **A D HARWOOD LTD - REPORT EP05/10/06** - Report prepared for 21 October 2005 hearing

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1. APPLICATION

A D Harwood Ltd (the applicant) operate a dairy farm at Upper Takaka. They have applied (RM050605) for consent to take and use water for irrigation of 90 hectares of land bounded by the Takaka River in the west and the Waitui Stream in the east. The applicant volunteers acceptance of the low flow conditions adopted for the downstream existing Sowman and Rosser consents and, while not stated in the application, the writer understands that the applicant also accepts the common (zone) expiry date of 31 May 2019.

A D Harwood Ltd also apply (RM050640) for landuse consent to construct an intake in the Takaka River for the purposes of exercising consent RM050605.

1.1 Application Details

RM050640

Location:	*Takaka River, Upper Takaka*
Legal Description (at take point):	*Sq 8 Sec 33*
Category of Water Source:	*Surface water*
Tributary:	*Takaka River*
Catchment:	*Takaka*
Zone:	*Takaka Surface*
Map reference:	*NZMS 260 N26:9340-1980*
Easting: 2493529 Northing: 6019947	
Maximum rate of take:	*40 litres/second*
	3,456 cubic metres/day
	24,192 cubic metres/week
Area irrigated:	*90 hectares*

Legal Description of areas to be irrigated:

Sections 32, 33, Pt 34, 35 and 36 Sq 8 Takaka SD being Parts of Valuation 1870032001 and 1870035900.

Notification

Application for resource consent to take water from the Takaka River for irrigation was initially lodged on 21 July 2005. The application was deferred while the notified deposit was paid and an additional land use consent application was lodged.

The applications were publicly notified on 20 August 2005 with the submission period closing on 16 September 2005.

Under TRMP Policy 30.2.4, Council is obliged to allocate water on the basis of priority in time (ie first in, first served) where there is still water available for allocation. The application by Mr Sowman (RM050340) was received before the Harwood application (RM050605) and therefore (Sowman) has priority in time provided there is water available for allocation.

1.2 Submissions

A total of nine submissions have been received to the A D Harwood Ltd application compared to thirteen for the B J and G M Sowman application. Eight of the nine submitters have also submitted to the B J and G M Sowman application including some who were original submitters to the Sowman consent NN020416. The submissions are summarised below.

A letter was also received from Transpower advising that high voltage lines pass over the applicant's property and advising the applicant should be aware of potential conflict. However, no concerns were raised presumably because a K Line system is proposed.

Robert Westerman, Marie Westerink, Klaus Wagmann, Kirstie Macleod and Bridget Mainsell

These submitters oppose the granting of consent for reasons including the need to protect the river from over-exploitation, protect amenity and landscape values. Submitters cite adverse effects and a deterioration of water quality resulting from dairying including river crossings by the applicant's own cows and that it is detrimentally affecting community use of the river for swimming and recreation. Various submitters oppose the use of a public resource (i.e water) by individuals to an extent that changes the river eco-system. Various submitters suggest a moratoria on new consents say for five years.

Of the above, Robert Westerman, Mark Manson, Klaus Wagmann and Bridget Mainsell do not request to be heard and Deidre Perreau does not state either way.

Mark Manson

Mr Manson submitted in opposition to the application. Mr Manson submits that the maximum take should not be raised from 10% to 33% of the five year flow. He is concerned that the proposed abstraction is excessive and that any further allocation should wait until TDC has completed its water investigations and policy for the region.

Mr Manson wishes to be heard in support of his submission.

D Perreau

Deidre Perreau opposes the application. She submits that the recent irrigation has lead to altered rates and duration of drying of the river bed and adverse effects on their swimming holes and wants to see no more consents granted.

Ms Perreau submitted to the original Sowman application that she wished to see strict monitoring of the quantity of water taken and a continued assessment of the effects of taking the water if consent is granted.

Fish & Game New Zealand

Fish & Game New Zealand – Nelson/Marlborough Region (F&G) submit that the Takaka River is a trout fishery of regional importance. F&G do not oppose the taking of water during normal flows, however, they do have concerns with the taking of water during low flows. Whilst noting that the Takaka River dries naturally below Lindsays Bridge and that flows are significantly affected by Cobb Hydro, F&G are concerned that existing and proposed abstraction may alter the rate and duration that this drying occurs. F&G note that this reach above Lindsay's Bridge holds good sized trout and acts as an important reservoir of fish and invertebrates to restock the re-wetted downstream reaches.

F&G seek confirmation whether the upper drying zone boundary has shifted upstream (5-600 metres), whether this may be due to recent irrigation and whether the current rationing triggers are adequate to protect in-stream values.

F&G want the resource consent declined unless there are conditions limiting the taking of water to above a particular flow threshold that will protect brown trout and the native fishery such that the drying zone boundary does not shift upstream.

F&G wish to be heard in support of their submission.

Royal Forest and Bird Protection Society NZ Inc

Royal Forest and Bird Protection Society NZ Inc (RF&B) have submitted in opposition to the application. They also oppose the Sowman application and were submitters to the original NN020416.

RF&B oppose the allocation of further water from the Takaka River in the absence of Council having adequate data to show that the effects of this application, and cumulative abstraction, on the Takaka River and Pupu Springs will not be significant. RF&B are concerned about possible adverse effects on flow, water quality, in-stream values and historic heritage. They cite the absence of allocation limits and a full assessment of the uses and values of the Takaka River and submit it is important to not over-allocate the resource in these circumstances.

RF&B are critical of various aspects of the application including the suggested irrigation just between 1 October and 30 April in any year, and the absence of a proposed expiry date.

RF&B identify the importance of the Te Waikoropupu as a recent historic heritage site (wahi tapu) and identify that river abstraction had a significant effect on the springs'. RF&B are critical of the absence of an assessment of cumulative effect, that no mention is made of water quality monitoring results and of the risk of increased nutrient, coliform and sediment run-off resulting from new irrigation.

RF&B identify inconsistency with Policy 31.1.11 TRMP and seek for the consent to be declined. If granted, they seek conditions including a five year consent duration, requiring mitigation in the form of riparian planting, low flow conditions, monitoring of take, and limiting application of water to 51mm per rotation. RF&B wish to be heard in support of their submission.

Summary of Issues Include:

Whilst acknowledging that the Takaka River dries naturally below Lindsays Bridge, many submitters are concerned that the existing and proposed abstraction will lead to increased rates and duration of drying of the river bed and lead to loss of swimming holes, as well as their contamination. Observations by locals is that the upper drying zone boundary has shifted upstream and there is concern this may be due to recent irrigation.

Concern that the abstractive allocation is too great and may not be restricted to 33% of the five year flow.

Concern that the affects of the existing and proposed abstraction are not fully known and about adverse effects on flow, water quality, in-stream values and historic heritage. The absence of allocation limits and a full assessment of the uses and values of the Takaka River is of concerned and it is important to not over-allocate the resource in these circumstances. That further allocation should wait until TDC has completed its investigations and water allocation limits for the region are established.

Concern about detrimental effects on the surface water quality. Submitters suggest various conditions to avoid, remedy or mitigate the adverse effects of the proposed taking of water including riparian plantings.

The reader is referred to the staff assessment of RM050340 (Sowman) for the sections of this report dealing with "statutory provisions and sections 1.3-1.7" which are common to the Sowman and this report and not repeated here.

Assessment of Affects

The applicant proposes to irrigate 90 hectares of pasture for dairying and has applied to take 24,192 m^3/week of water at a maximum rate of 40 L/s. This volume of water will be sufficient to irrigate the 90 hectares at just under the irrigation rate of 30 mm/week. Water is to be sourced directly from the Takaka River approximately 400 metres downstream of the NIWA (Harwood) recorder site.

The primary environmental effects of the proposed take on the Takaka River are considered to be:

- decreased flows in the Takaka River;

- impacts to Pupu Springs and groundwater recharge particularly at low flow;
- impacts to the quality and availability of aquatic habitat; and
- impacts to the intrinsic, amenity and recreational values of the Takaka River downstream of the abstraction site.

The reader is referred to the staff assessment of Rm050340 (Sowman), which details and backgrounds sections on river flow and affects on spring flow which are common to both Sowman and this application and where possible duplicate information is not repeated here.

1.8 Takaka River flows

Drying at the downstream end of the drying zone occurs when flows at the Harwoods flow recorder falls to 7,000 L/s and at the upstream end of the drying zone when flows at Hardwoods reach 3,500 L/s [1]. Based on the estimated loss of 750 L/s over this reach this equates to a flow of approximately 6,250 L/s and 2,750 L/s at Lindsay's Bridge end respectively.

The proposed Sowman take of 120 L/s is small compared to these flows being only 1.9% of the flow at the onset of drying at the downstream end of the drying zone and 4.4% of the available flow at the onset of drying at the upstream end of the drying zone. Checking Council's database shows a total maximum instantaneous take currently of about 159 l/s upstream of the Sowman take point. The Sowman increase of 17 L/s would bring total abstraction to 176 l/s and, if the Harwood application RM50605 is considered, the total increases to 216 l/s.

The effect of the new total abstraction (i.e 216 L/s) is still small, being 3.4% and 7.8% respectively of the flow at the onset of drying at lower and upper ends of the drying zone. Importantly, the effect of the Cobb Power Station was not considered as this water is ultimately discharged back into the Takaka River. The storage of water in the Cobb reservoir and past operation of the power station has resulted in the release of water during the drier summer months and hence augmented (ie increased) summer flows than would otherwise naturally occur.

The effect of the existing total take (159 L/s) or the proposed increased take (216L/s) is considered small. However, all consented takes upstream of the drying zone increase the degree and duration of river drying. The extent and degree of river drying is difficult to quantify as it is varies depending on background groundwater conditions, natural and augmented Takaka River flow conditions (i.e. Cobb generation) as well as prevailing climatic patterns. During average flow, groundwater and climatic conditions, staff's assessment is that the proposed increase in take is unlikely to significantly alter the occurrence and duration of flows ceasing in the drying zone. The effect would be more pronounced during the drier conditions and an upstream creep of 3-400 metres is possible.

[1] *Cobb Power Scheme – Takaka River Drying*, prepared for Natural Gas Corporation by Cawthron Institute (Cawthron report No. 635), May 2001.

The five-year seven-day low flow (average seven day low flow with a return period of five years) at the Harwoods recorder based on actual flow records is 1,588 L/s, however, this is affected by the operation of the Cobb Power Station where winter rainfall is stored and later released (as a result of hydro-electricity generation) over the drier summer period. Consequently, this is not the natural five-year seven-day low flow. The Council's hydrology section has estimated the natural five-year seven-day low flow (i.e. the flows that would occur in the absence of the Cobb Power Station) at the Harwoods flow recorder as 1,550 L/s, and 1,100 L/s at the downstream Lindsay's Bridge.

Policy 30.1.11 of the TRMP provides a guide to the allocation of water from rivers where the limit is not stated in the TRMP. Between 10% of the five-year seven-day low flow and up to 33% may be allocated from rivers if the cumulative adverse effects listed in Policy 30.1.9 are avoided, mitigated or remedied.

For the estimated natural five-year seven-day low flow at the Harwoods flow recorder this application alone allocates just 2.6% of the natural flow of 1,550 l/s. However, granting this application and Sowman's would result in a total take of 216 l/s or 13.9% of the five-year seven-day low flow at Harwoods. It is also relevant that the total take of 216 l/s would equate to 19.6% of the five-year seven-day low flow based on the five-year seven-day low flow at Lindsay's Bridge. However, the applicability of Policy 30.1.11 is at least questionable given the natural flow losses and become even more confusing in the river drying reach.

The extent that the adverse effects listed in Policy 30.1.9 can be attributed to the proposed (Harwood) take during periods of low flow is therefore small, but may be more than minor when the cumulative effect of other existing takes are included. Any direct takes above the drying zone affect river drying, hence the applicant will compound the extent and degree of river drying.

However, the principal effect of the proposed take is to reduce flow in the upstream reach valued by F&G for holding good sized trout and acting as an important reservoir of fish and invertebrates to restock the re-wetted downstream reaches.

At the same time, the effect is small compared with the natural variations. Furthermore, the discharge from the Cobb Power Station has had a far greater impact on the flow in the Takaka River in the past, including the onset and duration of zero flows in the drying zone. The effects of the Cobb Power Station are not necessarily adverse, as summer flows can be augmented from water being released from storage for hydro-electrical generation. As such times, there is clearly additional water available for allocation. Whilst past operation of the Cobb Power Station has been characterised by continual generation year round, albeit with daily variations, the renewed consent conditions, as granted, do not specifically limit the operation to any particular generation regime. It is conceivable that no, or very limited, generation could occur over the summer period when flows are naturally low. Hence effects of river takes would be more significant during low Cobb generation and drier climatic conditions.

The allocation approach for the Upper Takaka River in the absence of a complete understanding of the existing uses and values is to recommend a conservative allocation regime that will protect existing values will providing for some abstractive use of water when these values are not threatened.

The reader is referred to the staff assessment of Rm050340 (Sowman), which details and backgrounds the following sections including effects on Pupu Spring flows, water quality, proposed plan provisions and mitigation which are common to both Sowman and this report and where possible is not repeated here.

1.9 Rationing

As discussed, the Takaka River below Lindsay's Bridge naturally dries during the summer period. Drying has a significant impact on aquatic ecosystems and in stream values.

Above Lindsay's Bridge, the permanent flow means higher values are sustained as identified by F&G. The proposed Harwood take, in combination with the Rosser take, amounts to (53 + 40) 93l/sec or 6% of the five-year seven-day low flow at Harwoods i.e less than the 10% guideline under Policy 30.1.11 TRMP.

The TRMP states that there is an incomplete database regarding Schedule 30.1 and that updating will occur as investigations are completed. So as not to over-allocate the resource before these investigations are completed, restrictions apply to existing consents and are volunteered by the applicant. These restrictions effectively result in a cease take once the natural low flow of the Takaka River reaches its five year low flow or 1,550 L/s at the Harwoods flow recorder. Recall that this corresponds to 1,100 l/sec at Lindsay's Bridge.

Therefore, adopting the same rationing regime for the applicant as for Sowman and Rosser then, when flows in the Takaka River at the Harwoods flow recorder fall below 1,653 litres/second the consent holder shall reduce the abstraction rates in accordance with the following steps:

Takaka River flow at Harwoods recorder is below:	**Averaged maximum instantaneous rate of take:**	**Maximum weekly rate of take (cubic metres):**
1,577 L/s	27L/s	16,000
1,563 L/s	13L/s	8,000
1,550 L/s	0 L/s	0

The consent holder shall progressively reduce the maximum rate of abstraction in steps of approximately 33% such that estimated natural five-year seven-day low flow is maintained. The steps of 33% are primarily for simplicity for both the consent holder and the consent authority. Flow data is available from the Harwoods flow recorder on the Council's website (www.tdc.govt.nz) and will shortly be available via an automated phone service. Because of Cobb Hydro, the Takaka River is subject to rapid variations in flow as a result of generation and river flows will need to be checked daily and an assessment made as to whether there is sufficient flow for irrigation. Compliance will be monitored by appropriate metering. It can be seen that there can be no taking of water when the flows in the Takaka River at Harwoods are below 1,550 litres/second.

It is acknowledged that the proposed trigger flow where the taking of water shall cease is not necessarily in accordance with Policy 30.2.14. However, the approach continues that for the current consents and is considered reasonable given the absence of an allocation limit for this section of the Takaka River. In the absence of specified allocation limits and rationing requirements in the TRMP a conservative approach is recommended and is supported by submitters.

1.10 Water Metering and Compliance

Water metering the same as for both Sowman and Rosser consents are recommended if the application is granted. Similarly, it is proposed that the consent conditions state that exercising of the consent shall cease unless compliance can be guaranteed and meter records can confirm that is the case. Some method of alerting the applicant to Cobb shutdowns may also be required but, in its absence, the applicant should check daily that flows are above any rationing restriction. In addition to the data-logger data, it is also proposed that the applicant supply weekly readings on a fortnightly basis, the same as required for fully metered zones. This will ensure regular contact with the applicant by Council staff.

1.11 Farm Management Plan

Minimal information has been supplied on the soil type and optimal irrigation application rates for the applicant's farm. Policies 30.2.9 and 30.2.17 of the TRMP requires that the Council promotes the efficient use of the District's water resources. This specifically includes taking into account the soil water holding characteristics of the soil being irrigated [Policy 30.2.9(d)].

To ensure that the irrigation application rate is appropriate for the site soils, the recommended consent conditions require that prior to the exercise of the consent a farm management plan is prepared that details the soil types present and their soil water holding capacities and recommends an application rate such that drainage of irrigation water beyond the pasture rooting zone is avoided. The plan should also identify land where intensive stocking and irrigation should be avoided to minimise the risk of effluent runoff to surface and groundwater, including intermittent streams.

The maximum application rate may be as high as 50 mm/rotation only if is appropriate for the soil type present. If the farm management plan determines that a certain rotation frequency is appropriate for the soil types present, then the applicant should adopt this frequency.

1.12 Landuse Consent RM050640

The applicant proposes to construct an intake structure comprising a 900mm diameter pumping well located approximately 20 metres inland from the river bank. A trench will be cut to the river from this well and a pipe laid in the trench, which is then backfilled. The irrigation pump is therefore at the well and the pipe to the river needs to be large enough to convey the 40 l/sec applied for. The intake to the pipe will be screened to avoid entrainment of fish as required in the TRMP.

The primary environmental concerns of the construction and presence of the proposed intake structure is the potential for the discharge of sediment during construction, potential for adverse effects on flood flows, scour of the river bed and banks ie destabilising and loss of riparian vegetation on the river bank. This can be easily avoided with the appropriate construction and maintenance practices and re armouring of the bed and banks where necessary. That the necessary measures are adopted to avoid scour at the intake points is included in the recommended conditions in the attached consent template.

The design of the structure is such that the irrigation pump will be well clear of most expected flood flows.

1.13 Duration of Consent

If the Committee decides to grant resource consent RM050605 and RM050640 it is recommended they have the expiry date of 31 May 2019 in line with the common expiry date for water permits in the Takaka Water Management Zone listed in Schedule 31.1A of the TRMP and it is appropriate that the landuse consent for the intake structure have the same term.

It is relevant that the renewal of water permits are *controlled* activities under the TRMP, subject to various matters stated in Rule 31.1.3.

2. CONCLUSION

The proposed abstraction of water from the Takaka River for irrigation is consistent with the policies and objectives of the TRPS and TRMP. It is considered that the effects of the take are no more than minor when assessed against the naturally occurring drying of the Takaka River below Lindsay's Bridge and the affects from the exercise of the resource consents for the operation of the of the Cobb Power Station.

The operation of the Cobb Power Station will have a significant affect on the ability to exercise this resource consent subject to the proposed consent conditions and it may be necessary to review the appropriateness of this consent should changes to the operating regime of the Cobb Power Station occur.

Whilst the recommending this application, it is considered that Council must now undertake and complete the necessary investigations and promote, through a variation of the TRMP, appropriate zone boundaries and allocations limits that protect the available resource. This is both in terms of the Takaka River and the Waikoropupu-Arthur Marble aquifer system (and hence flows from Pupu Springs).

It is noted that no mitigation such as riparian planting and fencing has been offered. It is understood that the Council can only require such measures where provided for under an operative plan unless volunteered by the applicant and included as condition of consent.

Neil Tyson
Consent Planner (Water)

Appendix 1
Draft Consent Templates

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RM050605
Valuation 1870032001 and 1870035900

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of the application lodged by **A D HARWOOD LTD**

For a resource consent required under the Tasman Resource Management Plan (TRMP) and Section 14 of the aforesaid Act and a decision under the provisions of Sections 104 of the same aforesaid Act .

DECISION

THAT pursuant to Section 104 of the Resource Management Act 1991, the Hearing Committee under authority delegated by the Council GRANTS consent for the *take and use* of water for irrigation subject to the following conditions and for a period expiring on *31 May 2019*.

1. Location, Take and Use Details:

Location:	*Takaka River, Upper Takaka*
Legal Description (at take point):	*Sq 8 Sec 33*
Category of Water Source:	*Surface water*
Source:	*Takaka River*
Catchment:	*Takaka*
Zone:	*Takaka Surface*
Map reference:	*NZMS 260 N26:9340-1980*
Easting: 2493529 Northing: 6019947	
Maximum rate of take:	*40 litres/second*
	3,456 cubic metres/day
	24,192 cubic metres/week
Area irrigated:	*80.6 hectares*

Legal Description of areas to be irrigated:
Sections 32, 33, Pt 34, 35 and 36 Sq 8 Takaka SD

2. The taking of water shall be undertaken in accordance with the information supplied with application RM050605 except where otherwise required by the conditions of this resource consent or approved under a change of conditions.

3. At no time shall the maximum rates of take exceed those stated in Condition 1.

4. When flows in the Takaka River, as measured at the Harwoods flow recorder, fall below 1,653 litres/second the consent holder shall reduce the abstraction rates in accordance with the following steps:

Takaka River flow at Harwoods recorder is below:	**Averaged maximum instantaneous rate of take:**	**Maximum weekly rate of take (cubic metres):**
1,577 L/s	27L/s	16,000
1,563 L/s	13L/s	8,000
1,550 L/s	0 L/s	0

Takaka River flows are as measured at the Harwoods flow recorder.

There shall be no taking of water when the flows in the Takaka River, as measured at the Harwoods flow recorder are below 1,550 litres/second.

Advice Notice: The permit holder shall phone and interrogate the Harwoods recorder daily when they are irrigating to avoid non-compliance.

Water Meter Specifications, Maintenance and Readings:

5. The permit holder or their agent shall, at their own expense, install, operate and maintain a water meter that complies with the Council's *Water Meter Specifications* as stated in the Tasman Resource Management Plan

The water meter required under this condition shall be installed in accordance with the water meter manufacturer's specifications and a copy of this same specification shall be provided to Council's Co-ordinator Compliance Monitoring if requested.

6. Following installation of a water meter, the permit holder shall thereafter record their meter reading on the same day each week throughout every November to April inclusive and shall return their (two) meter readings to the Council's Co-ordinator Compliance Monitoring at the end of each two week period and by the date(s) specified each year (by Council), provided that Council reserves the right to require returns on a weekly basis during periods of water rationing in the zone.

The permit holder is also required to supply a complete record of their weekly water usage during the months of November to April inclusive and this includes recording any nil usage.

Advice Notice:
Regular (preferably Monday) meter readings are required to ensure consistent data as Council may monitor weekly use by consent holders.

7. In addition to Condition 5 and 6, the permit holder shall install and maintain a water meter with a pulse output, which shall be connected to an automated data-logger to provide a complete, time and date stamped, record of the water abstracted from the Takaka River.

   The time series abstraction data required pursuant to this condition shall be forwarded to the consent authority each year no later than 31 May each year or at any time if requested by the consent authority. The required abstraction data shall be forwarded to the consent authority within 20 working days from when requested.

8. The permit holder shall pay the reasonable costs associated with the monitoring of this permit including, if and when requested by Council, the full costs associated with water meter calibration to confirm their meter's accuracy is within the range of plus or minus five percent provided that meter calibration is not more frequent than five yearly and the full cost of monitoring compliance with the conditions of this consent including the reasonable costs associated with maintaining a water meter-usage database.

9. The maximum irrigation application rate per rotation shall not exceed 50 millimetres.

10. 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 two years, but without prejudice to the right of the consent holder to apply for a further resource consent in respect of the same matter.

11. 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 adverse effect on the environment which may arise from the exercise of the consent and which is appropriate to deal with at a later stage (including, but not limited to, changes in the flow regime of the Takaka River either as a result of natural climate variation or changes in the operating regime of the Cobb Power Station);

    b) to reduce the quantities and rates of water authorised to be taken if the permit is not fully exercised;

    c) when relevant national environmental standards have been made under Section 43 of the Resource Management Act 1991;

    d) requiring the adoption of the best practical option to remove or reduce any adverse effects on the environment; or

    e) complying with the requirements of a relevant operative rule in the Tasman Resource Management Plan or its successor relating to, but not limited to, the maximum or minimum levels or flows or rates of use of water, irrigation application rates, water metering requirements, or minimum standards of water quality.

Advice Notice:

Monitoring of this resource consent is required under Section 35 of the Resource Management Act 1991, and a deposit fee is payable at this time. Should monitoring costs exceed this initial fee, the Council will recover the additional amount from the resource consent holder. Monitoring costs are able to be minimised by consistently complying with the resource consent conditions.

RM050640
Property Valuations 1870032001
and 1870035900

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of the application lodged by **A D HARWOOD LTD**

For a resource consent required under the Tasman Resource Management Plan (TRMP) and Section 13 of the aforesaid Act and a decision under the provisions of Sections 104 of the same aforesaid Act

DECISION

THAT pursuant to Section 104 of the Resource Management Act 1991, the Hearing Committee under authority delegated by the Council GRANTS consent for the *construction, use and maintenance* of an intake structure subject to the following conditions and for a period expiring on *31 May 2019*.

Location Details:

Location:	*Takaka River, Upper Takaka*
Legal Description (at take point):	*Sq 8 Sec 33*
Site: *Takaka River*	
Map reference:	*NZMS 260 N26:9340-1980*
	Easting: 2493529 Northing: 6019947

1. The use and maintenance of the intake structure shall be in accordance with the information supplied with Application RM050605 and RM050640, except where otherwise required by the conditions of this resource consent.

2. The river intake shall be screened so as to avoid the entrainment of fish. The screen shall have a mesh size not greater than 5 millimetres and shall be constructed such that the intake velocity at the screens outer surface is less than 0.7 metres/second. The screen shall be maintained in good working order at all times.

3. The intake structure shall not present a barrier to fish migration in the Takaka River.

4. The construction and presence of the intake structure shall not result in adverse effects on flood flows.

5. The intake structure shall not result in scouring of the Takaka River bed or banks and any rock work shall be repaired or replaced to the satisfaction of the Council's Asset Engineer (Rivers).

6. The consent holder shall take all practical measures during construction and maintenance activities to avoid introducing silt and other contaminants to Takaka River.

   In addition, no discharge of sediment shall decrease the visual clarity of the water 50 metres downstream of the intake structure by more than 40%, as measured by the black disk method, compared to immediately upstream of the site.

7. 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:

   - Dealing with any adverse effect on the environment which may arise from the exercise of the consent and which is appropriate to deal with at a later stage (including, but not limited to, changes in the operating regime of the Cobb Power Station or changes to the resource consents for the operation of the Cobb Power Station);

   - When relevant national environmental standards have been made under Section 43 of the Resource Management Act 1991; or

   - Requiring the adoption of the best practical option to remove or reduce any adverse effects on the environment.

8. The intake well shall be covered and secured to prevent unauthorised entry and to minimise floodwater entering the well.

9. All care shall be taken to avoid and/or mimimise riparian vegetation and the river bank and site shall be returned to the same or similar condition as existed prior to the works.

   NOTATION 1

   Monitoring of this resource consent is required under Section 35 of the Resource Management Act 1991, and a deposit fee is payable at this time. Should monitoring costs exceed this initial fee, the Council will recover the additional amount from the resource consent holder. Monitoring costs are able to be minimised by consistently complying with the resource consent conditions.