

TIMBERLANDS WEST COAST LTD BEECH MANAGEMENT PRESCRIPTIONS

Responses to advice from the Independent Review Panel

PCE Progress Report No. 2

Office of the PARLIAMENTARY COMMISSIONER FOR THE ENVIRONMENT Te Kaitiaki Taiao a Te Whare Pāremata

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PREFACE

This assessment of Timberlands West Coast Limited (TWCL) plans to log beech forests on the company's estates is a follow up to a substantive review of Beech Management Prescriptions carried out by my predecessor in 1995. This assessment, and the original review, focus on the adequacy of the plans in terms of the ecological sustainability of the proposed harvesting regimes. This review particularly focuses on the adequacy of consultation and the public participation process recommended in the original review.

The question of whether or not to log the forests in the TWCL estate is a separate but legitimate one. The 1986 Forest Accord, substantiated by the subsequent High Court ruling, did not provide a societal mandate for logging of beech forests in the Crown owned lands of the TWCL estate. The decision to proceed with beech forest production is one for the forest owners, the Crown through TWCL, provided it is reached following adequate consultation with other interested parties.

Quite apart from TWCL proposals, it is important that New Zealand makes progress towards multiple use indigenous forest systems given the extensive areas of such forests in private ownership. This is, of course the intent of the Forests Amendment Act 1993. There is enormous opportunity to develop more sustainable systems provided there is progress on a number of fronts. Areas where there needs to be considerable effort include:

EXE The science

What research is needed to develop more sustainable indigenous forest management systems? Who should be doing it? How will the wider community judge its validity? How can the legitimacy of researching the development of more sustainable, multiple use indigenous forest systems be improved?

Information exchange/education

How can the wider community become more familiar with the enormous complexities of indigenous forest systems, and the research and monitoring needed to determine their long term ecological health under multiple uses?

ZE Trust

Who can be trusted to undertake research on the sustainable management of indigenous forests? How should consensus be reached on what constitutes ecological sustainability?

EX Dialogue

How does New Zealand society develop processes to conduct a mature debate around the conservation of and utilisation of indigenous forests, both Crown and privately owned? How do we incorporate science and other community knowledge and values into our decision-making?

Many of these questions, have not yet been adequately addressed in the process of developing the beech management proposals. It is this wider dialogue which must ultimately be worked through if New Zealand is to reach consensus on conservation and production goals for our indigenous forest lands outside the conservation estate.

While acknowledging that the question of whether to log or not is a legitimate one in relation to these particular forests, I wish to focus on "how to log sustainably". It is evident from the original review and my assessment of progress on recommendations, that there are major challenges in New Zealand to developing indigenous forest harvest systems that can provide conservation and timber products over a long period; i.e. that are ecologically sustainable.

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Dr J Morgan Williams Parliamentary Commissioner for the Environment

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1 INTRODUCTION

In November 1986 the West Coast Accord was signed by conservation **1.1 Background** groups and West Coast sawmilling interests, as well as the relevant government agencies of the day. The Accord transferred some areas of state forest into the conservation estate, some into production forest, and allowed for a possible sustainable yield beech scheme. Timberlands West Coast Limited (TWCL) was assigned management of the production forests under a Deed of Appointment with the shareholding Ministers in 1991.

In the early 1990s various West Coast interests' who were party to the West Coast Accord commenced proceedings against the Crown based on their belief that the Accord was a contract and that the Crown had breached that contract in a number of respects, including the provision of a sustained yield beech scheme. In 1995, the High Court reached its decision to the effect that the Accord is a contract for the disposal of timber over a lengthy period, but it also decided that the provision of a beech scheme was not a term of that contract, and that therefore the Crown had not breached the contract.* The West Coast interests lodged an appeal limited to the status of the third recital to the Accord which refers to the provision of indigenous forest for production in Buller until 2006. The Court of Appeal found that the Crown is not bound by that provision.³

The then Parliamentary Commissioner for the Environment (PCE) **1.2 1995 PCE** established an independent review panel in 1995 to assess the beech management plans of TWCL⁴. In 1996 the PCE reviewed the initial responses to the review recommendations to Ministers⁵, and earlier this year the PCE has requested an update from the company on progress in implementing the recommendations.

The purpose of this second progress review is to assess the response by TWCL to the recommendations made by the PCE in the 1995 review of TWCL's draft beech management plans. This assessment is provided as an input to the rigorous debate that must take place to ensure any future uses (conservation and/or production) are on a truly sustainable basis.

¹ The West Coast interests included the West Coast Regional Council, the West Coast district councils (Grey, Buller and Westland), West Coast Timber Association, Westport Sawmilling Co Ltd and some individuals.

² West Coast Regional Council et al v Attorney-General High Court, Wellington CP 478192, Greig J, 29 September 1995.

³ West Coast Regional Council et al v Attorney-General Court of Appeal CA 253/95, 10 June 1997.

⁴ The report was called "Timberlands West Coast Ltd Draft Beech Management Prescriptions, Review Panel Report", and was carried out in December 1995.

⁵ The report "Timberlands West Coast Ltd Draft Beech Management Prescriptions, Responses to Advice from the Independent Review Panel" was carried out in November 1996.

In publishing this document, the PCE hopes to promote informed discussion of the management framework and ecological principles within which TWCL proposes to operate at a time when the Government is inviting comment on TWCL's beech management and prescriptions.

1.3 Methodology The overview plan and the Maruia and Grey Valley working circle plans were made available to the PCE. in late September

Three of the 1995 review panel members were consulted during the preparation of this progress review to provide technical assistance on the plans, and to provide consistency with earlier reviews.

The review is limited to the original recommendations made by the PCE. There were 52 specific recommendations, and four major conclusions drawn in the original review. The recommendations are classified under headings according to the issue, and not discussed in the original order.

1.4 The consultationThis review is focused on what constitutes a valid consultation process. Outlined below are the views of the PCE's on this subject.

process

Should there be consultation?

In 1995 the PCE recommended that any beech management plans should be developed through a consultative process (recommendation 37). The Commissioner made that recommendation because in December 1995, New Zealand forest owners and environmental organisations agreed on **Principles** for Commercial Plantation Forest Management. These were seen as fitting for indigenous forest management also. One of the principles was "the promotion of collective responsibilities", which recognises the stakeholders in forest

ecosystems. The application of this principle to the indigenous forests managed by TWCL would necessitate the development of a framework for consultation.

In a letter to the PCE^6 , the Hon Philip Burdon, then Minister of State Owned Enterprises (SOEs), advised that the government would be seeking to ensure that recommendations of the independent PCE review would be appropriately recognised or incorporated into the ongoing revision and development of the beech management plans.

The public's expectation that it should be consulted over matters of great public interest has been raised by experience with the RMA. Not to consult on a matter which is clearly of national significance, would be dismissive of the public interest in this issue.

⁶ Letter to Parliamentary Commissioner for the Environment, received Feb. 7 1996, from Minister for State Owned Enterprises, for shareholding Ministers.

What is Consultation?

Consultation involves the consulting party (here TWCL) providing those to be consulted (in this case the public) with sufficient information to understand what is proposed, so that people who wish to do so can comment usefully to TWCL. The purpose of consultation is to ensure that the decision maker • TWCL or the Crown • is fully informed on all matters relevant to the decision as well as on the views of the public. Consultation does not mean that TWCL must act in accordance with the views expressed by the public; it should listen to the views expressed before making its decision, in this case on its beech management proposal.⁷

⁷ The leading case on consultation is *Wellington International Airport Ltd v Air New Zealand Ltd* [1993] 1 NZLR 671, which confirms McGechan J's first instance statement on the nature of consultation.

2 MAJOR CONCLUSIONS

The four main conclusions are assessed in the light of **TWCL's** recent response to the PCE and from the overview plans and prescriptions within which TWCL intend to operate.

PCE Review Panel, 1995

The TWCL prescriptions for beech management are an enormous improvement in approach since plans were first formulated in the 1970s. The documents are well written and TWCL is to be congratulated.

PCE Comment, 1998

The beech management plans prepared in 1998 are a further advance on the 1995 prescriptions with considerable information about the procedures that TWCL intends to implement in its management of the specific working circles. While the overview plan, and Maruia and Grey Valley working circle prescriptions contain extensive information on ecological management matters and display an awareness of the principles of sustainable management, much of the reference material is not publicly available, and therefore not verifiable. This makes it difficult for other stakeholders to adequately determine if the plans can deliver the desired ecological qualities. This therefore means that the quality and extent of ongoing monitoring, post implementation of the plan is critical.

PCE Review Panel, 1995

The Deed of Appointment which governs management of the beech forests contains few guidelines as to how the forests are to be managed, and many of its provisions are open to interpretation. This raises difficulties for the [review] panel in complying with their terms of reference without commenting specifically on the deed itself

PCE Comment, 1998

The Ministry of Agriculture and Forestry (MAF) is currently reviewing the West Coast Accord, and is seeking to bring in a consistent set of rules for all indigenous forestry management'. TWCL has acknowledged the Forests Amendment Act 1993 (FA Act 1993) in the beech management plans, at the request of its shareholders, but this is not an issue that should rely on the goodwill of an organisation to comply. By bringing TWCL under the FA Act 1993, basic principles of sustainability will need to be complied with. TWCL has exceeded these principles in its beech management overview.

2.1 Improvement in approach

2.2 Guidelines for management

⁸ Proposed Change to the West Coast Accord Strategy, May 1998, Ministry of Agriculture and Forestry.

The TWCL documents do not contain **sufficient** information to enable the [review] panel to judge whether sustainable management as provided for under the Resource Management Act (RMA) can be achieved.

PCE Comment, 1998

There is significant information on the environmental sustainability of future operations in the plans. However, there is a lack of economic information pertaining to the scale of research and development necessary to underpin the beech scheme. This does not allow this review to gauge the level of research that TWCL will undertake to establish whether the desired ecological qualities are or will be being sustained.

2.4 Information from stakeholders PCE Review Panel, 1995

The process followed by TWCL so far in developing its plans is only the *first* stage in the process **of** obtaining necessary approvals by Ministers, or by local government under the RMA. Information will be required from interested and affected parties on the potential environmental effects that are proposed, and how these can be avoided, remedied or mitigated.

PCE Comment, 1998

There are a number of stakeholders in this process who appear to have been insufficiently involved in the consultative process to date. TWCL appears reluctant to include public and tangata whenua consultation in its process which may create difficulties should resource consents be required.

The plans produced are extensive and technical, although an executive summary has also been prepared by an independent consultant to MAF. To date, the information provided to the public has predominantly been from special interest groups, and this could cause the general public to view the TWCL overview document as a reaction to these groups' views. TWCL has considerable work to do in explaining the intent of its proposals and winning the support of the public, many of whom have memories of native forestry practice in this country quite different to that proposed. There has been a great deal of consultation with experts; however, it is noted that the information flow has tended to be one way.

2.3 Achievement of sustainable management

3 RESPONSE OF TIMBERLANDS WEST COAST LTD TO THE 52 RECOMMENDATIONS'

The original recommendations are listed here, under relevant headings, along with a response by Timberlands West Coast Ltd (TWCL) in August 1998 to those original recommendations. The Parliamentary Commissioner for the Environment (PCE) has assessed TWCL's plans against;

Z TWCL's August 1998 response to these recommendations

Some of the recommendations are more relevant in 1998 than others; however, evaluation of the original recommendations is seen as a good yardstick to assess progress over time.

Recommendation 2:

That an amendment or addendum to the Deed of Appointment is negotiated with TWCL which clearly sets out principles and criteria by which the beech forest will be managed.

Timberlands Response"

The [beech management] plans are designed to replace the relevant clauses in the Deed of Appointment related to management of indigenous forest for timber and other values.

PCE Comments on Response

- Z The recommendation was directed to the Ministers of SOEs and Finance.
- The Government has stated its intention to bring all indigenous production forests under the same statutory regime. Because this intention has yet to be realised, the system for indigenous forest management is still fragmented.
- The 1995 PCE Review called for the development of principles and criteria with all stakeholders. It is not evident from the TWCL plans that this has occurred.

3.1 Clarification of responsibilities

⁹ Subsequent Timberlands West Coast Ltd (TWCL) additions to responses shown in italics as per letter received by PCE 27 August 1998 from TWCL

¹⁰ All TWCL responses quoted verbatim.

Recommendation 3:

That urgency is given to developing principles and criteria for the sustainable management of all indigenous production forests by amending the Forests Amendment Act (FA Act) 1993.

Timberlands Response

Not in TWCL's control.

PCE Comments on Response

- Response accepted since the recommendation was directed to the Minister of Agriculture and Forestry (MAF).
- TWCL is regulated by its Deed of Appointment (as in recommendation 2 above). An alternative to regulating TWCL in this way is to apply the FA Act 1993, which has sustainable management guidelines. At present TWCL complies with this Act at the request of its shareholder. The FA Act 1993 asserts a five yearly or longer review of plans (s 67i (2)). As previously mentioned, the Government has stated its intention to amend the FA Act 1993, but until this takes place, a fragmented situation remains.

3.2 Objectivity, auditing and transparency That an independent multi-disciplinary technical team is appointed to audit the Assessment of Environmental Effects (AEE).

Timberlands Response

The overview document is constructed to provide a full assessment of environmental effects and the appropriate management responses. There has been a range of independent scientific input to develop the plans. *In addition to Timberlands West Coast's scientific advisors, MAF has employed scientific advisors.*"

PCE Comments on Response

The 1995 PCE Review considered "that the public of New Zealand should have confidence in [TWCL's] operations." It saw an independent audit of an Assessment of Environmental Effects (AEE) with a public consultation process as a means of achieving this "confidence". The TWCL response falls somewhat short of this. The public has not had access to audit information. Until TWCL achieves Forest Stewardship Council (FSC) and ISO certification'*, MAF is the only appointed

¹¹ MAF employs advisors in a number of roles to assist in its auditing function.

[&]quot;Forest Stewardship Council and ISO 14001 are both international organisations that certify that the practices carried out by organisations such as TWCL are environmentally sound.

auditor, and its role is to audit compliance with the FA Act, not to audit an AEE. Its audit information is not easily available to the public.

The TWCL response refers to advisors, rather than auditors. There is an important difference in these roles. The Deed of Appointment, while not specifically calling for an audit of operations, states that the volume logged in any ten year period should not exceed the growth increase of the managed forest of that period. This statement implies some form of assessment of incremental growth assessment and volume extracted for every ten year period will be required. As noted above also, the FA Act 1993 refers to five yearly or longer reviews of plans by MAF.

Recommendation 6:

That the independent, multi-disciplinary technical audit team is also appointed as the Independent Auditor as specified in TWCL's plans to prepare a monitoring strategy and report every three years on the ability of the beech management plans to achieve sustainable management.

Timberlands Response

The plans propose an independent audit process on a five yearly interval as there will be insufficient change to measure on a three yearly cycle. The plans will also be subject to regular audit for compliance by the Ministry of Agriculture and Forestry. *Timberlands West Coast has also set targets to achieve independent external, verifiable,* **ISO** 14001 Environmental Management Certification and Sustainable Forest Management Certification under the Forest Stewardship Council.

PCE Comments on Response

- TWCL has not agreed to "an independent multi-disciplinary technical team". However, it has committed itself to scrutiny by an independent auditor "fully competent in forestry practice" appointed by TWCL. The company also aims to achieve ISO 14001 and FSC certification, but has not achieved this to date.
- While'acknowledging that TWCL will carry out extensive audits every five years, and indeed at this stage MAF plans to audit limited areas on a six monthly basis, it is felt that there is a need for the public to have access to audit information, and feel confident in the independence of the audit. International precedent has been set for the publishing of annual environmental reports by many companies. The PCE considers TWCL to be a suitable organisation for producing such a report via appropriate audit procedures.
- ISO and FSC certification principles are relatively broad based. This beech management proposal has some unique features and so New Zealand or even West Coast indigenous forestry practice standards need to be set by the Government, and TWCL audited against those. The overview and prescription documents provide standards against which TWCL can be audited.

It is suggested that an annual audit of; volume extracted, quality of timber extracted, the residual forest state along with future sustainable volume adjustments, as well as detail on environmental change be carried out and the results made available to the public.

Recommendation 7:

That the terms of reference for the independent technical audit team include assessment of any changes in estimation of sustainable yields.

Timberlands Response

Any audit of the plans invariably involves an assessment of the methodology in determining sustainable yields.

PCE Comments on Response

The scope of TWCL's audit does not specifically address changes in estimation of sustainable yield. TWCL would be advised to amend its scope of audit, to provide more environmental credibility.

Recommendation 16:

That TWCL carry out a landslide risk assessment on steepland areas with slopes over 30 degrees and earmarked for harvesting.

Timberlands Response

A landslide risk assessment was undertaken by a specialist in the field.

PCE Comments on Response

- Response accepted. An assessment was commissioned to look at the risks of landsliding under various logging systems. TWCL conclude that under aerial harvesting systems any impact on the environment would be minimal, if detectable at all. The PCE agrees with this conclusion, based on current knowledge of the subject.
- There is an issue with regard to ongoing monitoring of prescribed "aerial" harvest technique impacts that should be addressed by TWCL. (Refer recommendation 6, page 9, for detail of suggested audit content).

Recommendation 20:

That TWCL provides more information about the management approaches they intend to adopt to avoid adverse water table rises on poorly drained terrace surfaces in Paparoa and Granville Working Circles before seeking approval to harvest in these areas.

No longer relevant using aerial selection harvest systems.

PCE Comments on Response

The PCE suggests that TWCL would be wise to monitor selected managed areas to ensure that this issue is "no longer relevant".

Recommendation 25:

A comprehensive system should be developed for recording management operations, if this has not already been done, and this should be detailed within the management plans.

Timberlands Response

All management involves as of right comprehensive recording of operations and data derived from them.

PCE Comments on Response

- The 1995 PCE Review Panel described the need for "a network of permanent datum points to be established throughout the range of ecological variability within the TWCL estate". TWCL's overview plan discusses a "permanent sampling plot system covering all forests and major forest types" (page 97, 98 Maruia plan for maps). The Maruia Working Circle Plan also mentions "joint management agreements with Landcare Research". Although TWCL's response appears weak, there are positive signs that it intends to establish permanent sample plots and to share information with DOC.
- The overview plans do mention a tree register (page 160) against which MAP intends to carry out audits. The Maruia plan refers to it more comprehensively (page 89). This is a key to the auditing capabilities of TWCL's operations and should be a prominent feature in the overview plan.

Recommendation 32:

Provision should be made for harvesting systems and coupe size to be reevaluated at not more than three yearly intervals and modifications made on the basis of relevant new information in both biological and harvesting fields. The distributional pattern and needs of dependent forest biota are of particular relevance, as is the effect of coupe size on forest stability and health (eg. population outbreaks of pinhole beetles).

Timberlands Response

The latest gap size and spatial distribution data has been utilised in the development of appropriate selection felling systems. Where information is

deficient research has been prescribed and monitoring will be undertaken. Reviews are prescribed on a five yearly not a three yearly basis as there will be insufficient change to adequately document responses.

PCE Comments on Response

- Response accepted.
- It is suggested that there be ongoing monitoring of the effect of coupe size in influencing a possible increase in shade tolerant hardwoods, and also silver beech population increase at the expense of red beech.

Recommendation 33:

For the initial three years, any coupes or aggregates of coupes exceeding 5 ha should be confined to areas of low landscape value and be decided following an assessment of biological values. The Department of Conservation should participate in the assessment. The 5 ha cut-off is an arbitrary starting point, but does take some **cognisance** of the economics of harvesting catchment size, and landscape features.

Timberlands Response

Not relevant with selection systems.

PCE Comments on Response

- TWCL also proposes that the aerial harvest system will only produce coupes of size approximately 0.05 ha, and so this recommendation does not apply, as the plans stand at present.
- It is noted that the FA Act 1993 (with which TWCL has been asked to comply voluntarily) states in Schedule IIs 10.2 (c) that "beech and other light demanding hardwood species shall be harvested in coupes of 0.5 ha or less". This recommendation would be obsolete, if TWCL were bound by the Act.

Recommendation 34:

That areas with significant softwood are identified and managed on a longer rotation, more in keeping with the growth patterns of these species than with the shorter lived beech and "other hardwood" element.

Timberlands Response

Areas with significant softwoods have been protected from harvesting in some forests. Where they remain available for harvest they are managed independently on their own growth cycle.

PCE Comments on Response

Response accepted.

Recommendation 5:

That ministers are satisfied that a high-value end use has been secured before giving consent to harvest beech, and that proposals for end uses are able to support the sustainable management of the forests.

Timberlands Response

Beech management is only commercially viable using high value end uses for beech timbers. **These uses include paneling** furniture, flooring and veneered and solid interior finishing products.

PCE Comments on Response

- Recognising TWCL's unique position in business as an SOE, the company has the non specific objective to "achieve appropriate rates of return" (page 11 overview plan). There is still a need to clarify the balance between sustainable and financial objectives.
- There is a maximum volume extractable from the forest per year, and this is not annually cumulative. This prevents greater annual extraction in response to market demand than is sustainable.

Recommendation 43:

That TWCL assess the employment needs and expenditure patterns of various management options.

Timberlands Response

No assessment has been made of various management options since the move to selection management is viewed as the only system capable of delivering all the required ecological benefits to a high order. Compromised systems are seen to be either uneconomic and/or ecologically unsatisfactory therefore providing no employment.

PCE Comments on Response

Response accepted.

Recommendation 44:

That TWCL carry out a skills assessment (needs and availability) with respect to different management options and determine whether new targeted training courses need to be facilitated.

3.3 Financial incentives versus sustainable management incentives

TWCL is required under its own policies to be a good employer and also obligated under Occupational Safety legislation to ensure its staff and workers are adequately trained. TWCL is involved in assisting the establishment of modules for indigenous forest management under the Logging and Forest Industry Training Board (LFITB).

PCE Comments on Response

Response accepted. Cooperation with relevant agencies to identify the skill needs and gaps is still encouraged, particularly skills in sustainable management techniques outlined in the overview plan.

Recommendation 45:

That the Minister [of Research Science and Technology] investigates means by which an on-going multi-disciplinary research programme needed for the sustainable management of beech forests can be coordinated and the sources of funding identified.

Timberlands Response

Not applicable.

PCE Comments on Response

A coordinating group to ensure that research requirements are properly implemented, coordinated and adequately funded has not yet been established. It is noted that TWCL has an informal annual meeting of research organisations to discuss long term research. At this stage the Ministry of Research Science and Technology is not involved.

Recommendation 50:

That research is conducted to collect baseline data about the employment and skills needs of a range of indigenous forestry production systems. This will provide a basis for assessing future recruitment and skills needs, and the re-employment generation potential of the project.

That detailed studies of relevant West Coast communities involved in the utilisation of indigenous forestry are conducted (i) as a baseline for assessing the social impacts of indigenous forestry production and (ii) to develop an understanding of the interrelationships between industry formation and community formation, change and viability.

That research, using visual imagery techniques, be undertaken that assesses the importance of beech forest landscape and changes in this landscape to particular interest groups: the public, recreationists, industry (particularly tourism), tourists, etc.

No base line data in respect of the employment and skills for indigenous forest production has been collected. TWCL believes this recommendation arose from a perception that the industry would employ massive numbers of people in a totally new field of enterprise. The levels of production involved are such that training can be adequately catered for in house and through training modules under LFITB *or* existing university *training*.

The potential benefits of the utilisation of indigenous forests is documented in the preface to the management plans. Consultation has indicated there are no perceptions of down sides within the directly affected West Coast communities.

The move to aerial selection systems has negated the need for landscape impact research.

PCE Comments on Response

exe Comments made under recommendations 43, 44, (training needs and expenditure patterns) and **39, 40,** (landscape and recreation/tourism) also apply here.

Recommendation 52:

That in the first three years, TWCL restrict its harvesting operations to one working circle.

Timberlands Response

TWCL will not restrict its harvesting to one working circle in the first three years since to not harvest in others prevents the acquisition of knowledge and experience over that period. However harvest levels are not expected to exceed more than the capacity of one working circle in the first three years. Thus a cautious approach is implicit in the market development requirements of the management proposal.

PCE Comments on Response

The number of working circles used for harvesting should be determined by **TWCL's** ability to monitor operations and avoid adverse environmental effects. The low initial harvest levels spread over two working circles shows some adherence to the precautionary principle.

Recommendation 1:

That the Ministers [of SOEs and Finance] recognise that the West Coast Crown indigenous production forests have the potential to be utilised in settlement of the Ngai Tahu claim and that they should be managed in such a way that options for future management are retained. 3.4 Resource management issues and consultation

The essence of the plan is to ensure reversibility of human impact and preserve more options for future management.

PCE Comments on Response

This recommendation has become irrelevant now with the settlement of the Ngai Tahu claim without the inclusion of these forests. It is also noted, that the objectives of these low impact management systems are to minimise any irreversible changes which would compromise the needs of future generations.

Recommendation 8:

In the event that resource applications are made for the Maruia and Paparoa and/or Granville Working Circles, a joint hearing for all consents is organised.

Timberlands Response

These matters are outside TWCL's control.

PCE Comments on Response

- Response accepted as the recommendation was originally directed to the West Coast Regional Council and Tasman District Council.
- In fostering goodwill and encouraging support, TWCL could propose a joint hearing for all consents and submit its applications in a manner to facilitate this. However, it is acknowledged that the timing of operations in various authority areas may not allow this to occur.

Recommendation 9:

That a condition of resource consents for TWCL is that TWCL's three-year audit is released to both councils.

Timberlands Response

TWCL will release its audit reports as part of its ISO 14001 and FSC certification controls.

PCE Comments on Response

The recommendation was originally directed to West Coast Regional Council and Tasman District Council. It is noted that FSC and ISO 14001 certification have not yet been achieved. Monitoring of compliance with conditions placed on resource consents may or may not be assisted by the release of the audit reports.

Recommendation 10:

That in the event that the interested parties are denied the opportunity to comment on management plans for beech harvesting, the Minister [for the Environment] exercises his call-in powers under section 140 of the Resource Management Act 199 1.

Timberlands Response

Outside TWCL's control.

PCE Comments on Response

It is the PCE's view that "Opportunity to comment on" as stated in the original recommendation means consultation (refer to section 1.4). Four weeks have been allowed for comment on the current plans is not adequate for a consultation process.

Recommendation 24:

That TWCL request the New Zealand Minerals' Industry Association or the West Coast Commercial Gold Miners' Association to carry out an investigation of mining on TWCL lands to provide information about the effects of mining on stream water quality and information for the development of improved rehabilitation of disturbed mining sites in order for due consideration to be given to granting access to responsible companies.

Timberlands Response

TWCL have no authority to request such studies. *However Timberlands West Coast has requested of the Regional Council that it would like to see "codes of practice" integrated for the membership* **of** *the mining industry. This concept is now being promulgated by the Council and Timberlands West Coast will participate.*

PCE Comments on Response

we Under the Crown Minerals Act 1991 it is the Minister responsible who has the power to negotiate an access arrangement. There is no provision for this decision to be made by TWCL.

Recommendation 37:

That TWCL consult with tangata whenua and other interested and affected parties as soon as possible, and continue to do so throughout future phases of the development, while ensuring that these parties are given access to relevant information.

Timberlands Response

A large number of stakeholder groups inclusive of tangata whenua, the community, the conservation NGOs, local government representatives and forest users have been consulted. The list is included within the plans.

PCE Comments on Response

- TWCL appears to consider the consultation process consists of inviting stakeholders to visit sites to view and thereby understand. This process does not appear to have provided for the incorporation of any possible contribution of any visitors or commentators. There is little evidence to suggest that the groups so "consulted" have had an impact on the plans.
- It is difficult to ascertain what, if any, conditions/requirements have been negotiated from the consultation process.

Recommendation 38:

That TWCL in collaboration with tangata whenua, identify all sites of heritage and cultural value and assess the impacts on those sites of forestry production.

Timberlands Response

TWCL has made numerous attempts to establish meeting times with tangata whenua. At the time of writing there remains no formal meeting though this is expected shortly.

PCE Comments on Response

Zee Tangata whenua were not signatories to the West Coast Accord and appear to have remained outside subsequent processes involving the Crown and TWCL.

Recommendation 42:

That TWCL assess the extent of other economic uses in the area (such as hunting, mining and farming) and set up joint working parties to resolve conflicts of interest.

Timberlands Response

No other economic uses of the forests would be in conflict with beech management that are not already in conflict. There are no overlaps between farming, Sphagnum moss harvesting and the proposed management. Hunting is to be promoted as a means of wild animal control. Mining is and will remain largely incompatible with sustainable management but that situation prevails currently. The plans contain policy goals which nevertheless can be over ruled by the Crown in the granting of mining **licences**. (See section 7.1 of the beech plan).

PCE Comments on Response

- *EXE* It is noted that mining, sphagnum moss, firewood and grazing are outlined in the beech overview plan.
- There is no mention of joint working parties to resolve conflicts of interest in the plans.

Recommendation 11:

That TWCL continue with a systems-based approach to beech forest ecosystems and identify in their planning the essential ecological processes which a sustainable management system will seek to preserve or simulate.

Timberlands Response

The whole planning approach is based on management of integrated ecological systems, so key ecological processes have been identified and appropriate management responses prescribed.

PCE Comments on Response

The TWCL response is accepted. The TWCL overview plan identifies biodiversity and incorporates it into sustainable forest management. The adaptation of silvicultural systems which mimic natural stand replacement shows that this recommendation has been accepted.

Recommendation 12:

That TWCL and Department of Conservation (DOC) investigate means by which joint responsibility for maintaining ecological sustainability and biodiversity of the Crown forest resource can be carried out.

Timberlands Response

There is increasingly close liaison and cross boundary cooperation between DOC and TWCL. *This now includes a number of cooperative research projects.*

Ultimately however TWCL can only account for its actions on the land for which it is directly responsible.

PCE Comments on Response

This recommendation was originally directed to TWCL and DOC.

3.5 Ecological validity and research

- This response from TWCL is promising. However, it falls short of proposed "joint responsibility". With roles that overlap in research and conservation, "joint responsibility" is something for both agencies to strive towards. It is noted that there are a number of cooperative research projects, and regular management meetings between TWCL and DOC.
- This recommendation needs the full endorsement of the Ministers of Conservation and **SOEs** to succeed in implementation.

Recommendation 13:

That TWCL continue to develop protocols for inter-organisational and interagency liaison and management.

Timberlands Response

Protocols for interagency and inter-organisational liaison are incorporated within company environmental compliance programmes and the environmental certification processes.

PCE Comments on Response

- **TWCL's** overview plan defines policies towards other forest users individually but not collectively.
- Integration of the various organisational/agency management goals is not apparent.

Recommendation 14:

That a corridor network, including riparian strips and biodiversity reserves, be developed in consultation with DOC primarily for the needs of indigenous wildlife.

Timberlands Response

Reserves and riparian management areas have been developed upon firm recommendations from consulting scientists and was discussed with DOC. Much of the need for reserves has been reduced by the shift to selection harvest systems.

PCE Comments on Response

Response accepted. However, the same comments made for Recommendation 12 also apply, with regard to "joint responsibility".

Recommendation 15:

That TWCL work with DOC to provide buffer zones in collectively planning for their lands.

Timberlands Response

Buffer zones have been provided for in key wildlife and recreational areas however the need for these has been significantly reduced by the shift to selection harvest systems.

PCE Comments on Response

Response accepted.

Recommendation 17:

That TWCL provide more explicit information about their proposals to manage streamside (riparian) zones along water ways within their beech production forest areas.

Timberlands Response

Streamside management protocols have been developed and incorporated within the plans. The protocols have been signed off by DOC.

PCE Comments on Response

Response accepted.

Recommendation 18:

That criteria are developed which will enable decisions to be made about the design (width and composition) of riparian protection strips taking into account topography, forest type, stream factors (size, stream order, stream fauna) and soil and bank stability.

Timberlands Response

As above. (Recommendation 17)

PCE Comments on Response

Response accepted.

Recommendation 19:

That TWCL evaluate the likely impact of their management proposals on the fish and invertebrate faunas of beech forest streams.

Timberlands Response

The impacts of management on stream fauna were assessed and reported by a consultant. The report was signed off by the Department of Conservation. The West Coast Fish and Game Council were also consulted. Research to confirm the expected lack of impact is prescribed.

PCE Comments on Response

Response accepted.

Recommendation 21:

That TWCL develop a programme to monitor water table responses to harvesting on poorly drained terrace sites.

Timberlands Response

This requirement is redundant with the changes to selection systems.

PCE Comments on Response

Management of poorly drained terrace forests in a sustainable manner is still required regardless of the selection system. Monitoring of water table responses remains desirable. See recommendation 20 (page 10).

Recommendation 22:

That TWCL initiate an investigation into the impacts of harvesting on soil nutrient status.

Timberlands Response

The impacts of harvesting on soil nutrients, at ultra low levels of biomass removal and with minimum soil disturbance, cannot be assessed without actually removing trees. Monitoring for soil health is prescribed within the beech plans. *Linkages to relevant PGSF funded programmes are also documented.*

PCE Comments on Response

Encouragement of research, including soil and forest nutrients, from independent providers should feature within each working circle plan. The amended response to recommendations claims "linkages to relevant PGSF funded programmes are also documented". This is encouraging, but there needs to be some assurance of independent research.

Recommendation 23:

That TWCL include an expanded section on soil and water impacts in the main prescription document which includes an assessment of the risks to soil and water values, contingencies to protect these values and proposals for monitoring and researching soil and water responses to harvesting.

Timberlands Response

Considerably increased information has been provided in the plans under section 4.2 of the overview document. Concurrently, however, many of the potential concerns related to soil and water values have been significantly reduced by the shift to aerial selection harvesting. TWCL is linking with research organisations and "public good science funding" to ensure appropriate long term research in the area of soil nutrient retention and cycling.

PCE Comments on Response

- TWCL response would also apply to recommendation 22 (above).
- EXE It is acknowledged that there are now two report summaries and an explanation of the effects of the chosen harvest technique on soil and water impacts in section 4.2 of the overview document. This recommendation has been well acted upon.

Recommendation 26:

A network of permanent datum points, including TWCL's proposed network of Permanent Sample Plots (PSP's), should be established to gauge the effects of stand manipulation on flora and fauna. These should be positioned both in areas intended for manipulation and in comparable reserve areas so that both the short and long-term influences of forest management on the ecosystem can be gauged against processes which are occurring naturally.

Timberlands Response

The full network of permanent datum points are prescribed for with some monitoring prescribed to include both managed and unmanaged forests subject to co-operation from DOC. The company notes that as the Crown benefits from data derived from unmanaged forests some of these costs should be borne by the wider public.

PCE Comments on Response

Similar to Recommendation 25. The 1995 PCE Review described the need for "a network of permanent datum points to be established throughout the range of ecological variability within the TWCL estate". TWCL's overview plan discusses a "permanent sampling plot system covering all forests and major forest types". The Maruia Working Circle Plan also mentions "joint management agreements with Landcare Research". Although TWCL's response appears weak, there are positive signs that it intends to establish permanent sample plots and to share information with DOC.

✓ Working cooperatively with DOC to monitor ecological characteristics is a positive outcome.

Recommendation 35:

That the retention and management of the "other hardwood" component of the stand receives further attention in management prescriptions.

Timberlands Response

The other hardwood component of a forest remains protected under the selection harvest system.

PCE Comments on Response

Accepted. It is worth monitoring the status of both protected and unprotected species to ensure 'unnatural' domination by protected species does not occur.

Recommendation 46:

TWCL ensures that available information on biodiversity; whether in published form, or on databases; is accessed for all groups of biota and used to evaluate both biotic richness and potential requirements for management of biological diversity on the TWCL estate.

Poorly known groups of organisms within the North **Westland** beech forests are identified and surveys are mounted to determine conservation priorities and needs in relation to beech utilisation.

One-kilometre invertebrate surveys (and more detailed surveys as appropriate) are undertaken as a research priority and the results incorporated into planning documents.

The habitat requirements of forest wildlife in all forest types, particularly hard beech dominated forest, are identified. Particular attention should be paid to seasonal and annual variation in the use of food plant species and nesting sites.

The development of a set of ecological indicators should be initiated to provide a basis for monitoring biodiversity changes and other ecological changes.

TWCL *will* make available all its ecological and survey data to DOC and other research agencies. Surveys were conducted for birds, lizards and bats. Research was conducted to assess the risk of management impacts on invertebrates. However invertebrate surveys were recommended as being inappropriate.

Particular provision has been made for forest wildlife in the selection and harvesting methodologies adopted especially through the retention of large old trees and maintenance of similar forest structures.

The criteria developed from the Montreal process have been used as a basis by which the ecological sustainability of management can be gauged over time.

PCE Comments on Response

- **DOC's** biodiversity strategy and Ministry for the Environment's (MfE) sustainability criteria could provide guidance in the assessment of biodiversity values. Incorporation into MfE's environmental indicators programme may prove useful for information sharing and access to expertise.
- *EXE* If TWCL will make all its ecological and survey data available to research agencies, why has it not already done so?
- With the truncation of individual trees and the removal of biomass, it is considered that invertebrates would be one of the species most affected. It is still recommended that further and more detailed knowledge in this area is obtained.

Recommendation 47:

An investigation into the impacts of forest harvesting on soil nutrient status is initiated. The small logging coupe sites provide an opportunity to investigate the response of soils to forest removal.

Criteria are identified to enable the location and design (width and composition) of riparian protection strips to be decided.

The impacts of mining on stream water quality are investigated and research on rehabilitation of disturbed mining sites is continued.

Timberlands Response

Soil monitoring as prescribed and long term research linkages through "public good science funding" have been established to study the effect of harvesting on soils. Stream side management protocols have been implemented.

Research into the effects of mining on water quality and post mining restoration are not a responsibility of TWCL.

PCE Comments on Response

- This links back to recommendation 45 and the need to establish a research coordination group.
- Although the overview does not state it, TWCL intends to adopt the MfE soil monitoring system.

Recommendation 48:

That research and monitoring related to forest management be carried out as follows:

Research on small coupe harvesting should continue, and be extended by way of operations (research by management). An independent review should be undertaken at not more than three yearly intervals to assess the adequacy of the research effort and the level to which research findings have been incorporated into general management practices.

Research on the effect of coupe size on water table levels on flat, poorly drained terrace surfaces should be initiated to determine the best management system for these sites. The research will require careful monitoring or water table levels on a range of coupe sizes and under unmanaged stands, and will need to be long term to evaluate any influence of changed water tables on beech forest regeneration.

Research to determine the best approach for managing the amounts, size and distribution of coarse woody debris (CWD) on the forest floor during and after harvesting is required to ensure that forest regeneration processes are not adversely affected while, at the same time, good forest hygiene is maintained.

Provision of funding for the recommended forest management research should be shared between TWCL and FRST¹³ (eg through PGSF research contracts with NZFRI, Manaaki Whenua/Landcare) because, despite TWCL being the main beneficiary of the research, there is a strong public good element in this research.

Timberlands Response

Section 6 Monitoring and Research within the overview document lays out a comprehensive framework and list of priorities covering all the areas identified as requiring attention following consultation with relevant scientists.

¹³ Foundation for Research, Science and Technology

PCE Comments on Response

- The overview plan outlines research in gap dynamics, although it is not stated whether it will be independently reviewed.
- The undrained soils referred to in the original recommendation will not be affected as greatly with the new harvest system, but it is recommended that a statement is formally made with regard to this soil type, and that its condition is monitored.
- Research is already underway on regeneration and silviculture, with regard to CWD, forest hygiene and "species compositional assemblages and changes". The independence of that research is not mentioned.

Recommendation 49:

Small coupe management research should be maintained to enable an assessment to be made of the pinhole borer attack pressure on coupe margin trees when the offspring of the first attack emerge.

Research on the pheromones of Platypus beetle species of the West Coast beech forests should be reactivated and completed to enable development of an effective survey tool for population surveys and monitoring. In addition, the possibilities for mass trapping should be evaluated.

A thorough review of past research and other accumulated information related to the insect and **fungal** problems in beech forests, and including potential threats from overseas pests and diseases should be undertaken to assess potential threats to the beech forests in any future large scale utilisation of beech forests.

Adequate and effective indicators of forest health should be developed to provide a basis for forest health monitoring.

Timberlands Response

Small coupe research continues though the system is no longer applicable to TWCL selection systems.

Research into Platypus beetle will be undertaken where relevant to the systems applied by TWCL. Monitoring systems for Platypus have been developed and are prescribed for.

A review of past information related to beech forest disease was undertaken; see Recommendation 36.

Forest health will be monitored through both global forest health surveys and specific in forest post harvest monitoring.

PCE Comments on Response

TWCL would be advised to develop a working relationship with the Department of Conservation, New Zealand Forest Research Institute Ltd and other research agencies to protect the health of the South Island beech forests. This could be supported by FRST through the PGSF.

Recommendation 51:

That an assessment is made of the impacts of beech forest management on the sequestration and emissions of CO_2 as part of New Zealand's Climate Change Strategy.

Timberlands Response

Not applicable. The company notes that control of animals may assist the carbon balance within beech forests.

PCE Comments on Response

- Green Package funding has been made available for improving information on carbon stored in indigenous forests (\$1 million over 3 years).

3.6 Alteration to forest make up That TWCL plan to maintain the balance of dominance of timber producing species in production management areas.

Timberlands Response

The prime silvicultural objective for old growth forests is to maintain the current balance of all species.

PCE Comments on Response

- The retention of forest structure in a form similar to that occurring naturally is the more important criteria. Other sub dominant species will be affected, and their balance should be maintained also. Research is being carried out in this area by TWCL.
- Maintenance of the current forest structure may require manipulation of regeneration in coupes. The small coupe size could allow more shade tolerant species such as Kamahi and Quintinia to become more abundant, at the expense of other species.

Recommendation 28:

That during thinning operations saplings are retained in proportion to their representation in the parent stands.

Timberlands Response

This recommendation is largely redundant with the move to aerial selection harvest. However in already highly modified forest structures, species composition shifts may have already occurred. These will not always be reversed.

PCE Comments on Response

- Nevertheless, the principle still seems valid retention of forest structure in proportion to representation during harvesting operations.
- There is a high degree of variability in parent stand make up. Should the objective be to make all harvested stands look the same, or should the objective be to maintain or increase the level of variability?
- A research agenda needs to be developed for appropriate thinning operations. The key areas for monitoring have been identified in the overview plans, but the framework and methodology are not disclosed.

Recommendation 29:

That the thinning regimes adopted are more conservative and allow for the retention of larger number of stems later in the rotation, and that good forestry hygiene is **practised** to compensate for any resultant increase in the potential for pinhole damage.

Timberlands Response

Thinning regimes become more conservative in the few situations where they remain applicable to the current management proposals.

PCE Comments on Response

Thinning, or "improvement fellings" are noted as other forest altering activities. Is the intent to improve production capacity of the forest, or improve forest health, or both? The objective of improvement felling needs to be clearly stated, that is, to convert previously logged, even aged stands to a more natural, mixed age structure.

Recommendation 30:

Where regeneration is inadequate, preparation of a seed bed by understorey manipulation should be undertaken sufficiently prior to harvest to stimulate

adequate establishment of advance growth. If this is unsuccessful, or where exposure of advance growth seedlings is likely to lead to problems of winter desiccation, then harvest should be restricted to small, less than 0.5 ha coupes. Alternatively the stand should be left intact until after regeneration occurs.

Timberlands Response

Preparation of seed beds by understorey manipulation and other management interventions is specified in the specific circumstances applicable.

PCE Comments on Response

Response accepted. The special circumstances are listed on page 120 of the overview plan.

Recommendation 31:

Seed trees and dead trees should not be retained within operational areas, or in the vicinity of roads or other high use areas, but a network of biodiversity reserves should be retained throughout to provide habitat for fauna and flora which rely on the niches provided by the over mature stages of forest development for their existence.

Timberlands Response

This recommendation is not relevant under a selection system. However, dead trees will be specifically retained for biodiversity reasons where safety is not compromised.

PCE Comments on Response

The principle of the recommendation still applies. Retention of a natural proportion of old, or dead standing trees that may be critical for the survival of some species (eg. kaka, parakeet) is important.

Recommendation 36:

That a thorough review be made of the NZFRI and old Forest Service records to assess potential pest and pathogen problems. Those likely to have an impact on forest health should be monitored and the effect of various management practices on populations of them ascertained.

Timberlands Response

Potential pest and pathogen problems were reviewed and management responses documented in a report commissioned from the New Zealand Forest Research Institute.

PCE Comments on Response

ø NZFRI concluded there to be a low risk.

Recommendation 39:

That TWCL develop a landscape plan for each working circle and carry out on-going landscape assessment during all phases of the development.

Timberlands Response

The move to aerial selection harvesting results in minimum landscape impact. See recommendation 40.

PCE Comments on Response

The most visually sensitive areas eg. the lower Maruia Valley, still require care to avoid or mitigate any type of visual impacts. A landscape plan would still appear desirable for such areas. There is also the consideration of log storage and transport, and their visual impact.

Recommendation 40:

That TWCL assess current or expected recreational use for the areas involved and develop a recreation management plan for each working circle (to which patterns of beech utilisation are required to accord).

Timberlands Response

A recreation management plan was developed for the company's forests taking into account current and expected usage and prescribing appropriate management policies and action where relevant. The report was authored by a past Conservator West Coast Department of Conservation.

PCE Comments on Response

The review of recreational/tourism values of the managed estate should now be used to develop a recreation/tourism management plan for each working circle – in consultation with relevant interested parties, and complete prior to production commencing in that working circle.

Recommendation 41:

That TWCL provide more information in the management plan on current or expected tourism for the areas involved and identify possible areas of conflict (preferably in collaboration with the Department of Conservation and local tourism groups).

3.7 Amenity values

Sections of the relevant plans draw on information contained within the Tourism and Recreation Management Plan. The plan identified a few areas of conflict and the West Coast Tourism Council has been consulted over the proposed beech management programme.

PCE Comments on Response

- The Maruia and Grey Valley Working Circle Plans contain little information on recreation/tourism. It is noted that TWCL has a recreation management plan.
- A business that is transparent in its operations may be able to capitalise on commercial tourism based on viewing silvicultural practices and indigenous forest management. It has the potential to become a significant side business and educational tool for TWCL.

4 CONCLUSIONS

The overview plan and Maruia and Grey Valley plans show evidence of thorough scientific input into their construction. From the reference material available it would appear that the proposals incorporate the principles of sustainability. The plans represent considerable progress towards an integrated adaptive management system that seeks to provide timber products while maintaining ecological sustainability.

This evaluation of action on the 1995 recommendations raises two main areas of concern; the consultation processes and the nature of reporting on ongoing environmental auditing practices to be carried out.

The need for a thorough consultation programme to be an integral part of developing the beech management plans was stressed by the Commissioner in 1995. Inviting who Timberlands West Coast Ltd (TWCL) deem to be interested parties to "view and understand" is not considered a totally valid consultation process. While the Deed of Appointment does not specifically require TWCL to consult parties other than its shareholders, Government acknowledged the need to do so when responding to the 1995 review recommendations.

TWCL has sought advice from consultants, with the resulting information potentially being screened by TWCL before its incorporation into the plans, or general release, although it is noted that the plans have been certified by the Indigenous Forestry Unit of Ministry of Agriculture and Forestry (MAF). Approximately half of the reference material cited in the plans is unpublished and not readily available. In addition, there are important statements that are not referenced. This has limited some aspects of this review of progress on the 1995 recommendations, and is a significant constraint on the assessment of the plans by many stakeholders. The result is that public scrutiny of all of the available information is not possible, and so adequate consultation is therefore not really possible.

Secondly, there is lack of specificity over what an audit of TWCL will cover, and whether the results will be able to be readily scrutinised by the public. There is a lack of substance in the information provided as to precisely on what environmental aspects TWCL will be audited, how often, and by whom. MAF and the Forest Stewardship Council (FSC) have been indicated as contributors to audit processes; the latter via the FSC certification system. ISO 14001 certification is also proposed. However, neither ISO 14001 or FSC certification have been achieved to date.

5 RECOMMENDATIONS

To the Minister of SOEs;

- Given the complexity of the beech management plans, and difficulty of access to much of the resource material on which they are based, extend the time allocated for public comment until mid December 1998.
- Appoint an independent auditor, to carry out an annual audit of the impacts Timberlands West Coast Ltd have on the beech forest ecosystems, with the results publicly reported, in a similar way to a public company's 'statement of financial performance'.
- In partnership with the Minister responsible for the Ministry of Agriculture and Forestry, and the Minister for Conservation, facilitate the development of a programme to improve public understanding of indigenous forest utilisation issues, where both production and conservation goals are sought.

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7 GLOSSARY

AEE	Assessment of environmental effects
Coupe	An area to be harvested, a felling circle
CWD	Coarse woody debris
DOC	Department of Conservation
FRST	Fund for research in science and technology
FSC	Forest Stewardship Council
FA Act 1993	Forests Amendment Act 1993
LFITB	Logging and forest industry training board
MAF	Ministry of Agriculture and Forestry
NGO's	Non government organisations
NZFRI	New Zealand Forest Research Institute
PGSF	Public Good Science Fund
SOEs	State owned enterprises
TWCL	Timberlands West Coast :Limited

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