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5th August 2008

The Secretary
Senate Standing Committee on Rural and Regional Affairs and Transport
PO Box 6100
Parliament House
Canberra ACT 2600

Email: rrat.sen@aph.gov.au

**Inquiry into the Implementation, Operation and Administration of the Legislation Underpinning Carbon Sink Forests**

Dear Committee Members

We wish to thank the committee for allowing our late submission and apologise for any inconvenience we may have caused. We welcome the opportunity to provide comment on this most important topic.

The Environment Association Inc is a voluntary, not for profit, regional; community based incorporated association with a focus on conservation and care for the environment. We were the first rural Tasmanian environment centre and are a stakeholder over forestry and forest conservation matters.

Our submission is that we oppose this legislation. We consider the legislation, as it stands to be premature, ill conceived and against the public interest. We reject it and urge that it be rescinded.

We would like to thank the Rudd Labour Government for signing the Kyoto Protocol agreement. The lack of commitment of the previous Government was an embarrassment and hopelessly irresponsible. Of course the legislation for tax-deductibility for carbon sink forests had its gestation in the Liberal machine.

We urge you to recommend that the Government start again here when some of the fundamentals of carbon trading are resolved. At that time it may deem similar or different legislation to be appropriate but right at the moment it appears to be an ambit claim to replace the unsustainable Managed Investment Schemes 'tax haven'.

This legislation will have particular undesirable impacts for Rural Tasmania. The proposed regulations are unworkable and inadequate.

There is an urgent imperative to act effectively over the threat of human induced climate change. We refer you to the enclosed article: "Two years to climate change meltdown" by Nicholas Shakespeare.

## Artificial Tree Plantations are not Forests

In Tasmania the industry refers to Artificial Plantations as Tree Farms. We use the term Artificial Plantations because the Tasmanian Government uses that term when

describing Land Uses via TheList, the state system of land use classification used by the Valuer General. We quote from TheList:

***L - Primary Production***
*L3 - Forestry*
*L31 - Forestry-Artificial Plantation*
*L311 - Forestry-Artificial-Authority*
*L312 - Forestry-Artificial-Private*
*L32 - Forestry-Nursery*
*L321 - Forestry-Nursery-Authority*
*L322 - Forestry-Nursery-Private*
*L33 - Forestry-Natural Bush*
*L331 - Forestry-Natural Bush-Authority*
*L332 - Forestry-Natural Bush-Private*

You can see that the full name is "*Forestry-Artificial Plantation".* It is noteworthy that the L series is Primary Production. That is the Tasmanian Government considers forestry to be in the same category as all other agricultural pursuits.

The classification of Forestry Natural Bush refers to native forest.

There are two important things to be gained from these facts.

The first is that the Tasmanian Government considers that *Forestry-Artificial Plantation*, that is the planting and maintaining of intensively planted forestry trees, is not natural Bush, or what we, more accurately, term Natural Forest.

The second is that the Tasmanian Government considers *Forestry-Artificial Plantation* forestry to be a part of agriculture.

This view is further supported when one goes to the Tasmanian State Policy on the Protection of Agricultural Land, known as PAL. We enclose the latest version of that policy for your reference. PAL considers *Forestry-Artificial Plantation* to be agriculture. However under PAL it does not consider *Forestry-Natural Bush* to be agriculture.

Our understanding is that agricultural pursuits are to be deferred under carbon trading and introduced some years later. If that is so why is this matter coming before the Parliament now?

Arguably the more important matter is that *Artificially Planted Trees* do not constitute a forest. A forest is a whole living thing. Its ecological balance supports a range of biota and the gamut of carbon life forms, providing a life-supporting ecosystem fundamental to our survival on this planet. Natural forest sequesters far more carbon than plantations.

The legislation pretends, erroneously that *Artificial Plantations* are Forests. This is untrue. This misdirection and misinformation misleads the Australian people. We urge you strongly to have the integrity to recommend rejecting this legislation entirely on this point alone.

It is instructive to consider the relative Biophysical naturalness of the differing types of land and the vegetation they support. The RFAs used a system. We reproduce the summary table below.

**Table 3.1 Biophysical naturalness rating scheme**

| Class | Generic National Wilderness Inventory class description | Class description for Tasmanian CRA |
|---|---|---|
| *5* | *Unlogged and ungrazed* | *Unlogged and ungrazed* |
| *4* | *Unlogged and ungrazed for xx years; excludes clear-felled areas and intensively grazed areas* | ***Selectively logged before 1950** or where THH records suggest logging post-1950 but the visual disturbance analysis, from the SENCODE, indicates minimal impact, and/or **possible grazing**, indicated by rough grazing (PI code) in 'naturally grassy areas'* |
| *3* | *Single selective logging or irregular grazing, or both, in preceding xx years* | ***Lightly-logged post 1950**, indicated by selective logging post-1950 (with PI code of mature eucalypt or regrowth), PI cut-over where the THH is unknown, and/or **likely grazing**, indicated by evidence of pasture in 'naturally grassy' forest areas or rough grazing on the Central Plateau* |
| *2* | *Light to moderate grazing or repeated selective logging, or both, in preceding xx years* | ***Heavily selectively logged post-1950**, indicated by **selectively logged post-1950** (where the PI and SENCODE suggest high levels of disturbance); eucalypt regeneration with mature eucalypt or other species; or cut-over rainforest; and/or **very likely grazing disturbance** indicated by evidence of pasture under forest-PI code 'v'-on public land (except on the Central Plateau or in 'naturally grassy' forest areas)* |
| *1* | *Clear-fell logging operations or intensive grazing, or both* | ***Eucalypt plantation or clear-felled** and/or **mining disturbance from Mt Lyell** and/or **evidence of intensive grazing** assessed from SENCODE (V) or **evidence of pasture** -PI code 'v'-on non-'naturally grassy forest areas' on private land* |
| *0* | *Cleared land or non-natural land cover* | ***Non-natural land cover** Cleared land or significant evidence of grazing from PI code on non-'naturally grassy areas'* |

***Note:** In keeping with the National Wilderness Inventory guidelines, the period (xx) since selective logging ceased, which was used to distinguish between values 3 and 4, was selected to reflect regional perspectives. A period of 46 years-post-1950-has been used in this analysis.*
*Source: Derived from Lesslie and Maslen (1995).*
*This information formed the basis of the wilderness and wild rivers infrastructure disturbance assessments and will contribute to the National Estate assessment.*

The point is that one can see that artificial plantations have a far lower biophysical naturalness rating than several qualities of native forest. Indeed Artificial Plantations have a BN of 1 and thus there are four qualities of native forest with a higher BN than plantations, yet native forest is being unreasonably discriminated against in carbon sink terms.

The higher life supporting qualities of natural forests include the function of carbon sequestration.

We avoid the old growth forest issue as the definition is too flaky and there is far too much contention. Native forests have been mapped under the RFA using the BN system, derived mainly from Forestry Tasmania PI data. Anything with a BN of 3 or more will often contain old growth elements and most probably more carbon. There are natural variations between wet and dry forests.

## Carbon Trading

Carbon is a natural asset. The Australian Government wishes to turn it into a tradable commodity.

We understand the urgent need to consider the value of carbon assets and support this important initiative.

If carbon is to be valued (and only when it is valued can it have a value) it is vitally important to consider the whole of the carbon estate, not just intensively managed *Artificial Plantations.*

We strongly urge that the native forest estate be considered in terms of its carbon for carbon trading purposes and for any ancillary benefits such as taxation relief.

Maintaining native forests is a public interest matter and should attract benefits especially for the owner of private native forests who retain them in the public interest.

To single out *Artificial Plantation* development for a taxation benefit is discriminatory. We believe the legislation which pretends that *Artificial Plantations* are forests but is in fact limited to *Artificial Plantations* can be shown to be discriminatory. Please reject this legislation (and any regulations under it) because it discriminates unreasonably and unfairly in relation to other forms of carbon.

It is unwise to exclude the existing standing carbon of the native forest estate for a number of reasons. Under this legislation it appears the forestry industry can get a tax write-off to demolish native forest and destroy existing life saving carbon to establish *Artificial Plantations* and call them carbon sinks. It is extraordinary that the legislation would enable tax relief for removing existing carbon. It is arcane and hardly logical, a twisted strategy that does not seem to serve any useful purpose.

It should be remembered that over ninety percent of all forest carbon extracted and sold goes to woodchip to make non-durable products. It is described as waste. Then, of the other ten percent only about two tenths becomes timber. Of that (now two percent of the original total) only a portion becomes durable product such as house framing or furniture because of further waste. Consequently, when you chop down a native forest and extract the carbon for wood most is either not durable or is wasted in the process.

It is far more important to recognise that life supporting natural forests should be left standing now. This is necessary to ensure our survival.

There is a vast store of carbon in the native forests of Australia. We cannot speak for the other states but in Tasmania there is a stated aim to mine out the native forest. Even under Regional Forest Agreements the proposal is to convert Natural Forests to *Managed Forests* and/or *Artificial Plantations.* These conversions are now criticised from a number of perspectives.

Land Clearance is rightly regarded under the EPBC Act as a Threatening Process. But this legislation, including Ms Wong's Guidelines of the 2-7-2008 which merely provide examples that are unworkable. Despite those examples one can see that Land Clearance can continue. Thus we have the absurd situation where standing mature forests that is not regarded as remnant becomes targeted for the obliteration of its carbon in order to establish an *Artificial Plantation.*

At this point we must remind you that in broad terms Australia is committed to ecologically sustainable development. Most people do not know what it is but there are commitments. The Commonwealth words are:

> *'Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'*

Sustainable development does not occur when a Threatening Process converts an existing carbon store of natural forest into an *Artificial Plantation.* In this instance there is a complete draw down, extraction and destruction, to allow a tax deduction. Now we find this a travesty of the principle of sustainable development.

Climate Change is a very real and pressing matter. It is not good enough to create mechanisms that entrench unsustainable activities and condone the continuation of harmful threatening processes and indeed by way of taxation encouragement, we argue actively cause the demise of the planet. The legislation should be regarded as a crime and discarded.

Clearly with a dangerous climate change situation upon us, appropriate urgent action is required to make Australia sustainable. This legislation is not it.

## Carbon Sinks

The retention of carbon should be reviewed as a protective function. Conserving and protecting soil, water and biodiversity have been a focus in the past. Now it is appropriate the Government protects the carbon. Our survival depends upon it. The retention and protection of carbon is a public interest issue. At the time of the Tasmanian RFA carbon as a commodity was a relatively new phenomenon and was not properly considered. Now that should be fixed.

We believe that carbon trading will be more successful if the standing native forest is included as a carbon sink. This is a crucial issue. Native forest is already a carbon sink. There is far more carbon to be traded as carbon sink native forests than in artificial plantations. The difference is vast. That means there can be more trading if native forests are not excluded as is currently proposed. This is so important.

We make the further point that land with carbon is owned both by private people, corporations and the States and Commonwealth. This current legislation is designed to assist principally only one of those groups - corporations. Strangely the group already being assisted by the MIS tax benefit.

We advocate that native forests be included as carbon sinks and that mechanisms to achieve the retention of carbon sink native forests be developed now.

We advocate that carbon sink forest reserves be established as a category under the national Reserve System and that Australia's representative to the IUCN seeks to

convince the IUCN to add a new category of reserve to its listing for the purpose of formally conserving carbon sink forests.

Our point is that when carbon sinks are formally reserved there is a much greater security for trading purposes, and especially when those sinks are not short-term, intensive, artificial, forestry plantations. Short-term plantations should not be regarded as carbon sinks. Let's not forget that plantations aren't carbon sinks from the time they are planted and will be cut down after fifteen years. Riparian, Landcare and windbreak plantings of useful size and long term nature would seem to be a different and more valid case than intensive tree farms.

Giving primacy to artificial plantations grown using methods and systems of intensive cultivation creates a fast growing short-lived product not ideally suited to the long-term development of an extensive estate of carbon sink forests.

In this regard we believe the Government has been misadvised and should reconsider its strategy in regards to carbon sinks.

A carbon sink reserve must be a secure reserve where carbon is quantified and allowed to naturally increase.

One point is that native forest on private land is poorly conserved and yet an important contributor to biodiversity. Facilitating the conservation of carbon on private land would have additional biodiversity benefits.

## Ms Wong's Guidelines

Unfortunately we consider these guidelines to be very unsatisfactory and cannot support them in any way whatsoever. Our reasons are as follows:

Firstly the detail under the three points is merely an example. That is totally amazing, ridiculous and meaningless. It could not be relied upon. Is this what Government has come to? However, notwithstanding that, we discuss some of the examples given.

In regard to prime Agricultural Land the Tasmanian PAL policy allows plantations on prime land and the latest draft policy (2007) allows twenty five percent of the prime land to be gobbled by artificial plantations. Important agriculture exists on land other than prime land. Indeed this is the majority of the agricultural land. This goes unprotected from carbon sink predation. This is social issue for rural communities. In northern Tasmania we do not yet have rural decline. But if the Commonwealth keeps going with favoured treatment for the artificial plantation sector our rural community will quickly go into decline. Artificial plantations do not employ many people.

Indeed it has to be said that when the Commonwealth got rid of the Export Control Act and deregulated forestry the amount of forest consumed increased substantially but no more jobs were created. The current level of forestry jobs in Tasmania is about 6,000 and at the time of the RFA it was about 6,000. But the level of cut has dramatically increased so the jobs have actually declined in relation to the amount of living carbon that is being destroyed under the RFA. One can hardly say well done.

The three points are:

*1. Carbon sink forest establishment should be based on regionally applicable best practice approaches for achieving multiple land and water environmental benefits.*

*2. Carbon sink forest establishment activities should be guided by regional natural resource management plans and water sharing plans, and environmental impacts at a catchment scale should be considered.*

*3. Carbon sink forest establishment activities should recognise and adhere to all government regulatory requirements.*

All the three points unwisely use the word 'should'. That is unacceptable as it provides no strong compelling guidance and can be misinterpreted. 'Should' statements in the forestry industry are well known as statements where one does not have to comply. We recommend the replacement of all should words with must or will.

The three points (and their subpoint examples) do not satisfy the public interest test and do not ensure that rural communities will be protected, that agriculture for food or threatened species will be considered.

We mention the plight of Threatened Species because it is our experience that forestry in Tasmania condones and regularly carries out land clearance of threatened species habitat.

Further the Commonwealth has ignored its obligations to progress recovery plans for important species where land clearance and conversion of mature forests to regenerating forests is causing a threat to those species.

We draw the committee's attention to the plight of the Spotted-tailed Quoll for which there a draft recovery plan has seemingly been in abeyance since 2004. Such poor performance is a relevant consideration in the context that Ms Wong's guidelines do not mention Threatened Species at all but rather mentioning weeds and feral animals achieve pretence of care. How could something so fundamental as Threatened Species be left off the list of guidelines? Was it accidental? Was it incompetence?

Because land clearance is not precluded in these guidelines threatened species habitat would continue to be cleared especially in northern Tasmania.

Ms Wong's guidelines suggest that artificial plantations are not benign. She is correct here. We make the following observations and points regarding plantations:

Artificial Plantation establishment has the following concerns:

- The trees are close spaced and thus it is fire risk. Usually such a danger is not adequately mitigated though firebreaks.

- The soil is completely disturbed and not always ploughed along the contours thus an erosion hazard exists and represents a pollution threat to water catchments.

- Land clearance and conversion causes the draw down of existing carbon and biodiversity.

- Most plantations are established using diesel powered equipment and the whole affair takes considerable time. The diesel is imported.

- Most plantations use herbicides, usually in cocktail of several types all combined into a helicopter for aerial spraying. People are over sprayed. We have had several instances of trying to help people lathered with herbicide.

- Artificial chemical fertiliser is used, much of which is imported from somewhere like China.

- Most private land plantations in Tasmania still use 1080 poison as discussed elsewhere.

- Artificial Plantations usually have an impact on landscape values as discussed below.

- Artificial Plantations of close spaced trees have a greater water requirement, which is acknowledged in Ms Wong's guidelines. But how would you successfully regulate this water consumption matter using these guidelines?

- Artificial Plantations represent an intensified form of forestry, which is not subject to appeal under Tasmania legislation as discussed below. Much other intensive agriculture is usually established with proper planning controls and appeals. We cannot see how the impacts of artificial plantations and the gross amounts of climate polluting inputs make them a desirable target for carbon sinks as a first step.

- It already competes unfairly under MIS taxation with agriculture for the land resource. It will cause rural decline. It is removing food growers from the area.

- It employs few people and is largely mechanised.

We ask you to understand that Tasmania's land use and other regulatory systems for forestry are not sufficient to ensure ecologically sustainable development and in that situation legislation should not provide taxation benefit.

## The Tasmanian Situation

As mentioned above we have alerted you to the fact that in Tasmania there is a clear intent to mine out the existing carbon of the native forests. That can be most clearly demonstrated by reference to the enclosed document by Private Forests Tasmania (PFT). Tasmanian Private Property Wood Flow Estimates 2002 to 2031 (file: woodflowweb.pdf). You can see from this document that PFT is planning to massively over cut the private forests of Tasmania and that the production of wood products will severely decline from about 2017. This is evidence that extraction is occurring and that sustainable development is being avoided.

Private Forests Tasmania is the encouragement agency for the forestry industry. The draw down on the native forests is not only planned, it is occurring here in rural Tasmania. It is unsustainable as denies opportunity for future generations. It disadvantages the future.

Private Land is just one aspect. A similar but less severe situation is occurring on state forests. The level of cut of state forest is meant to be an eighty-five year rotation but clearly the level of cut has a lower rotation period probably about sixty years at present. State Forests should be managed for the public benefit but are being

managed for the forestry industry and corporate profit. The draw down on natural forests on public land cannot be construed as having a public benefit as the carbon store is diminished and climate change aggravated.

The aggravation of climate change on both state and private land includes the burning of vast amounts of waste left from the logging operation. This causes massive pollution and contributes to the carbon released from the dead forest into the atmosphere.

When one considers published land tenure statistics in Tasmania one finds that private land is very poorly reserved. Only about two percent of private forested land is reserved. We enclose Land Tenure Statistics for Tasmania Ist Jan 2008. You will see the poor private land reservation situation. The matter is worse than it seems as this document has omitted the statistic of the Private Timber Reserve, a unique Tasmanian in-perpetuity land-planning instrument that dedicates forestry on particular land. The published statistics are not very up to date on this tenure and not included in the above document. But are in the order of 1,900 PTRs covering over 430,000 Ha of land in the period to 30-6-2007.

We have seen a massive expansion of Private Timber Reserves (PTR) in Tasmania in the last 10 years. A map of these should be inspected. Mapping of PTR's is public and on TheList. Many of these are plantations but not all. The effect of a PTR is to remove land from the local planning scheme.

Artificial Plantations in Tasmania on private land are usually established with 1080 poison. This is a non-target poison, which kills a wide range of native fauna including the Tasmanian bettong and the Spotted-tailed Quoll. There are reports of secondary poisoning of raptors. It is an old and dangerous poison that has been phased out on public land but persists on private land. It is unsustainable to establish an artificial plantation with 1080 poison. Ms Wong's guidelines do not preclude 1080 usage even though the EPBC lists it as a threat to Spotted-tailed Quolls. Tasmania has about 50% of Australia's remaining Quolls.

Tasmania has no legislated protection of its natural and cultural landscapes. Tasmania is regarded as a beautiful place. It is a natural attraction for visitation. Artificial Plantations repeatedly scar landscapes and cause considerable community angst. The National Estate listed landscape feature The Great Western Tiers is degraded and diminished by artificial plantation establishment under MIS taxation incentives. This area (our region) gains substantial benefit from tourism and the RFA allocated 1.5 mil to a tourism centre to encourage other jobs but the natural resource is degraded by MIS taxation. The local council has a an agreement with the state to implement landscape management and a study done with public moneys but forestry sectoral interests have sabotaged the introduction of controls that may ensure that landscape matters are considered in artificial plantation establishment. Artificial plantation establishment is not sustainable development in Tasmania.

Forestry operates under separate legislation in Tasmania to other development. This legislation has no rights of appeal for the general public. Local councils, which operate under the RMPS system, are loath to impose a Discretionary Use status for forestry and thus the community has no right of redress to appeal when it perceives a development is not sustainable, not in the public interest or which they fear may harm them. The legislation (The Forest Practices Act 1985) has no definitions of the fundamental objectives such as Sustainable Management and is an industry-funded system of self-regulation under the Act's objectives.

There is such a level of conflict and unhappiness in the Tasmanian community over forestry that we believe there is a need to reconsider this Commonwealth legislation and it's deleterious affect. For decades forestry in Tasmania has been beleaguered by conflict.

Currently the state of Tasmania is conducting a review of the Planning System for which submissions were sought. The solicitor and barrister Shaun McElwaine of Launceston who regularly advises Meander Valley Council and Gunns Limited made one of the submissions to that review. We enclose a copy of his submission and bring to your attention the sections on Third Party Appeals (page 6) and on Performance Based Planning Schemes (page 8). His views on appeal rights are most germane to any deliberation over forestry in Tasmania. We urge you to read that section of his submission. He encapsulates it in the sentence:

> *"To restrict third party appeals is to ignore the most fundamental basis of proper land use planning and development and the decision making processes which must take place before use and development is approved."*

Our view has long been that forestry should be a Discretionary Use within the Rural Zone of local government planning schemes in Tasmania because this is fair and just. It provides an avenue for appealing unsatisfactory developments whilst allowing the good ones to proceed. The Local Council in the circumstance where forestry is a Discretionary Use would retain the right to refuse an unsatisfactory development. Most have currently negated that right in their planning schemes though Permitted Use status. Forestry sits on the Local Government Association's forestry committee.

There is a need to provide a just and fair planning instrument with proper appeal rights to forestry by ensuring that forestry can be appealed before the Commonwealth considers further encouragement. This is a duty of care situation.

We argue that forestry impacts are far more severe in many cases than the building of a house or shed for example and that the retention of the right to approve or disallow a forestry development is a reasonable opportunity to acquit a duty of care to the community and the greater good.

In recent years there has been a massive expansion in plantation forestry in Northern Tasmania under MIS taxation incentives. Under proposed carbon trading rules that expansion is set to continue and probably escalate. Currently local governments have no brake or control on this avalanche of plantation development. That needs to change before new Commonwealth legislation encouraging more artificial plantations is introduced. Artificial Forestry Plantation establishment represents an intensification that makes it a different land use with different impacts from regular forestry.

Australia's attempts to sequester carbon to mitigate global climate warming are likely to promote a mass expansion of artificial plantations in Tasmania. A great social concern for Tasmania is that farming activity is being replaced by artificial plantations which employ very few. The reduction in farming activity, the local production of food and associated employment is a long-term loss that may well have severe impacts for the viability of our community. This intensive plantation expansion route has been chosen instead of focusing on the conservation and protection of existing carbon held in natural forests. Indeed the Commonwealth is complicit in the mining out of these forests, Australia's natural carbon store.

We make the point that a majority of the native forest estate in Tasmania is on public land and establishing carbon sinks on public land would be in the public interest. We argue that to not do so would be against the public interest.

The Tasmania RFA has seen expansion of extraction of native forest for no increased public benefit and thus from a social perspective the RFA is a failure. Best then meet the public interest test and conserve the existing carbon.

## Conclusion

We make no apology for opposing this ill-conceived legislation. We consider it iniquitous and discriminatory. It has the potential to harm our community socially.

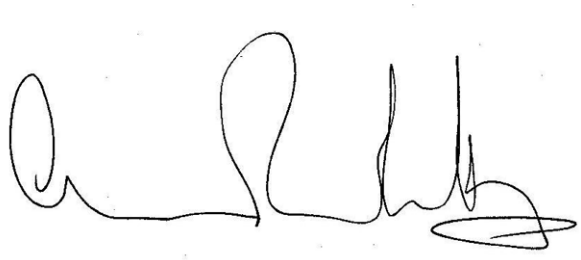
We urge you again to recommend to rescind this poorly founded legislation. Carbon trading and climate change initiatives and strategy must be fully developed and a set of responsible regulations drafted. We oppose the existing regulations.

We urge native forests be included as carbon sinks in the Australian governments climate change programs and that a transition away from extraction of them occur now before they are logged out, further aggravating climate change.

We are able to support this submission with photographic evidence of damage to the environment by forestry. If there is any aspect for which you require clarification we would welcome the opportunity to assist the committee.

It is vital that you understand the grave consequences of getting the recipe correct at this time. You are out of time over climate change.

Yours faithfully



Andrew Ricketts
Convenor

# Tasmanian Private Property

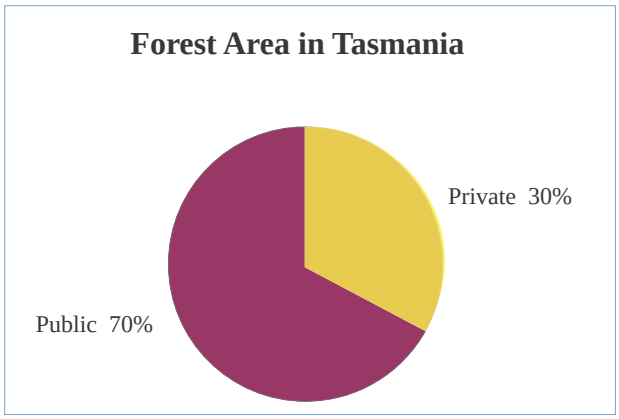
# Wood Flow Estimates 2002 to 2031

Private Forests Tasmania

# Tasmanian Private Property Wood Flow Estimates 2002 to 2031

## Overview

Private forests play an important role in Tasmania – making up about 30% of the forested area and contributing substantially to the State's sustainable Natural Resource Management outcomes through wood production, conservation, recreation and aesthetics.




Tasmania is unique amongst the States of Australia in providing an estimate of potential wood flow from private forests. Private Forests Tasmania (PFT) co-ordinates the update process about every 5 years, using a range of assumptions about expected plantation development, rates of native forest harvest and regeneration and owner intention to harvest.

In Tasmania there is a wide range of private owners including large industrial forest companies owning and managing thousands of hectares, extensive farming enterprises incorporating managed forests with other agricultural activity and many individual owners with less than 40 hectares of forest.

It is a challenging task to estimate the potential wood flow from such different potential sources of forest products, especially as many landowners are uncertain when, if at all, they may want to harvest part or all of their forests. The market price a grower receives for the forest products plays an influential role in helping to determine when harvesting will occur. Consequently, the wood flow estimates produced in this report should be viewed as a likely scenario, with many alternative options possible if different assumptions are made.

The wood flow estimates are summarized in tables and graphs below - see *Fast Facts*. The information is aggregated at the state level, with key assumptions and other important information detailed in *Key Assumptions & Things You Should Know* below and the body of the report.

## Key Points

- Native forest harvest on private land will decline from 2,410,000 tonnes in current five years to 660,000 tonnes in 2027-2031.
- Plantation hardwood harvest will increase 450% to 3.68 million tonnes in 2027-31.
- Plantation softwood harvest for sawlog and veneer will increase 225% to 340,000 tonnes in 2027-31 and current ratio of softwood pulpwood to sawlog harvest will effectively reverse between now and 2027-31.
- Hardwood sawlog and veneer harvest will decline significantly from 330,000 tonnes in 2002-06 to 130,000 tonnes in 2027-31.
- Hardwood sawlog and veneer harvest will fall from 360,000 tonnes to 80,000 tonnes (-450%) between 2012-16 and 2017-21 periods.

## Fast Facts

### Tasmanian Private Property - Predicted Resource Woodflows

source - Private Forests Tasmania, 2004, figures rounded and based on a range of assumptions

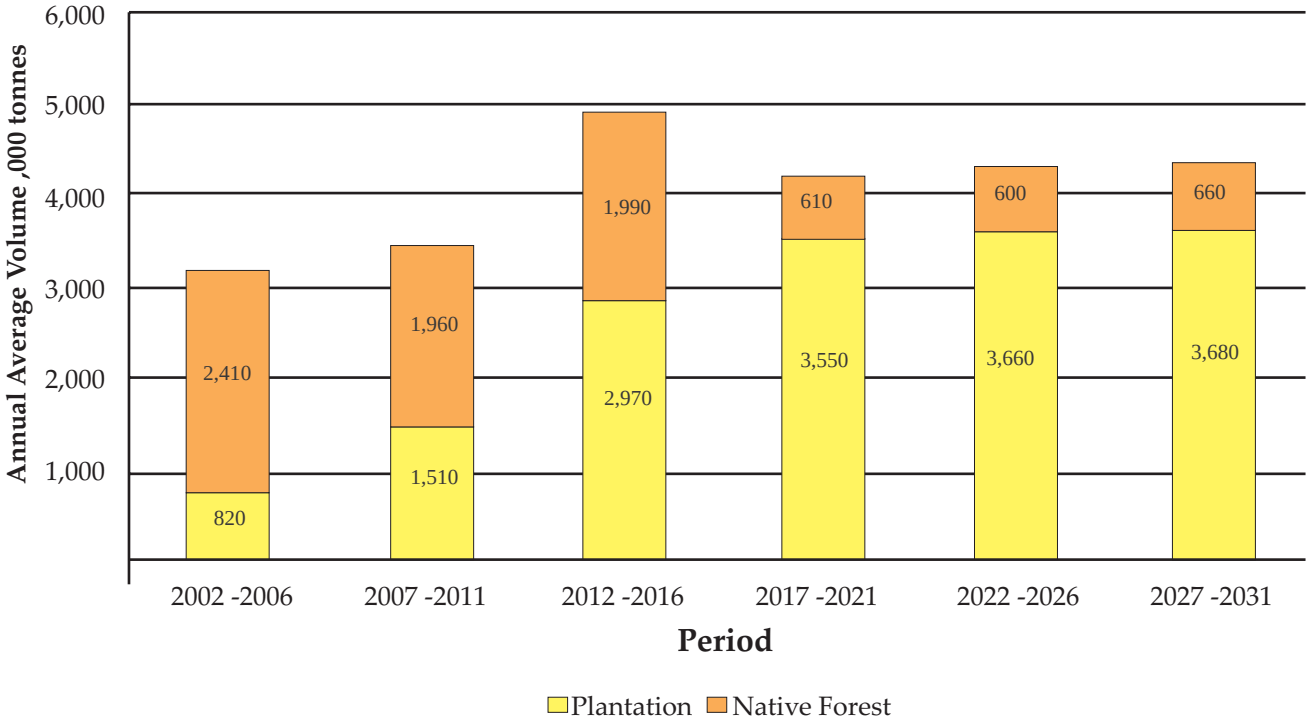
### 5 Year Averages

Annual amount shown for each year in the period

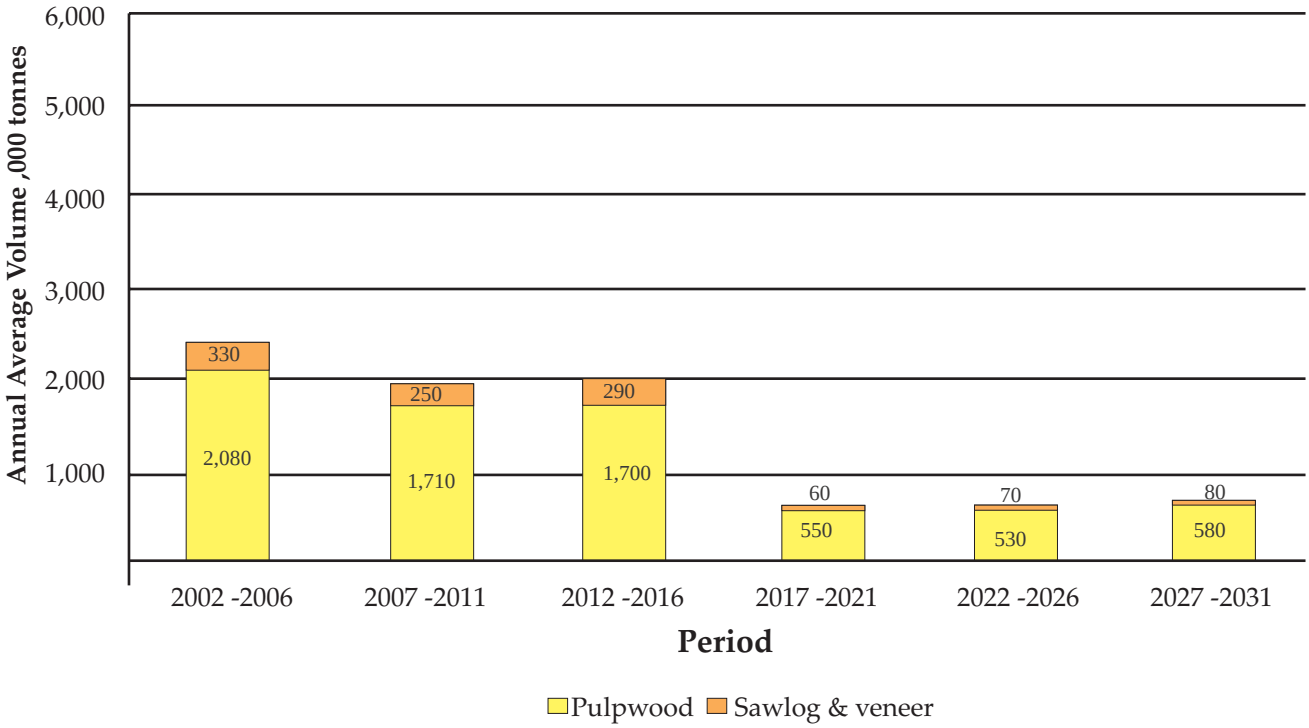
| Start Year | 2002 | 2007 | 2012 | 2017 | 2022 | 2027 |
|---|---|---|---|---|---|---|
| Finish Year | 2006 | 2011 | 2016 | 2021 | 2026 | 2031 |
| **HARDWOOD** | | | | | | |
| **Native Forest** | | | | | | |
| Sawlog and Veneer | 330,000 | 250,000 | 290,000 | 60,000 | 70,000 | 80,000 |
| Pulpwood | 2,080,000 | 1,710,000 | 1,700,000 | 550,000 | 530,000 | 580,000 |
| Plantation | | | | | | |
| Sawlog and Veneer | 0 | 20,000 | 70,000 | 20,000 | 50,000 | 50,000 |
| Pulpwood | 820,000 | 1,490,000 | 2,900,000 | 3,530,000 | 3,610,000 | 3,630,000 |
| **TOTAL HARDWOOD** | 3,230,000 | 3,470,000 | 4,960,000 | 4,160,000 | 4,260,000 | 4,340,000 |
| **SOFTWOOD** | | | | | | |
| Plantation | | | | | | |
| Sawlog and Veneer | 150,000 | 160,000 | 270,000 | 280,000 | 210,000 | 340,000 |
| Pulpwood | 360,000 | 180,000 | 230,000 | 210,000 | 170,000 | 200,000 |
| **TOTAL SOFTWOOD** | 510,000 | 340,000 | 500,000 | 490,000 | 380,000 | 540,000 |

***Important Note:*** The information contained in the graphs below is based on and should be read in conjunction with some important assumptions - see *Key Assumptions & Things You Should Know* below and the body of the report for more details.

**Hardwood- all Tasmanian private property**



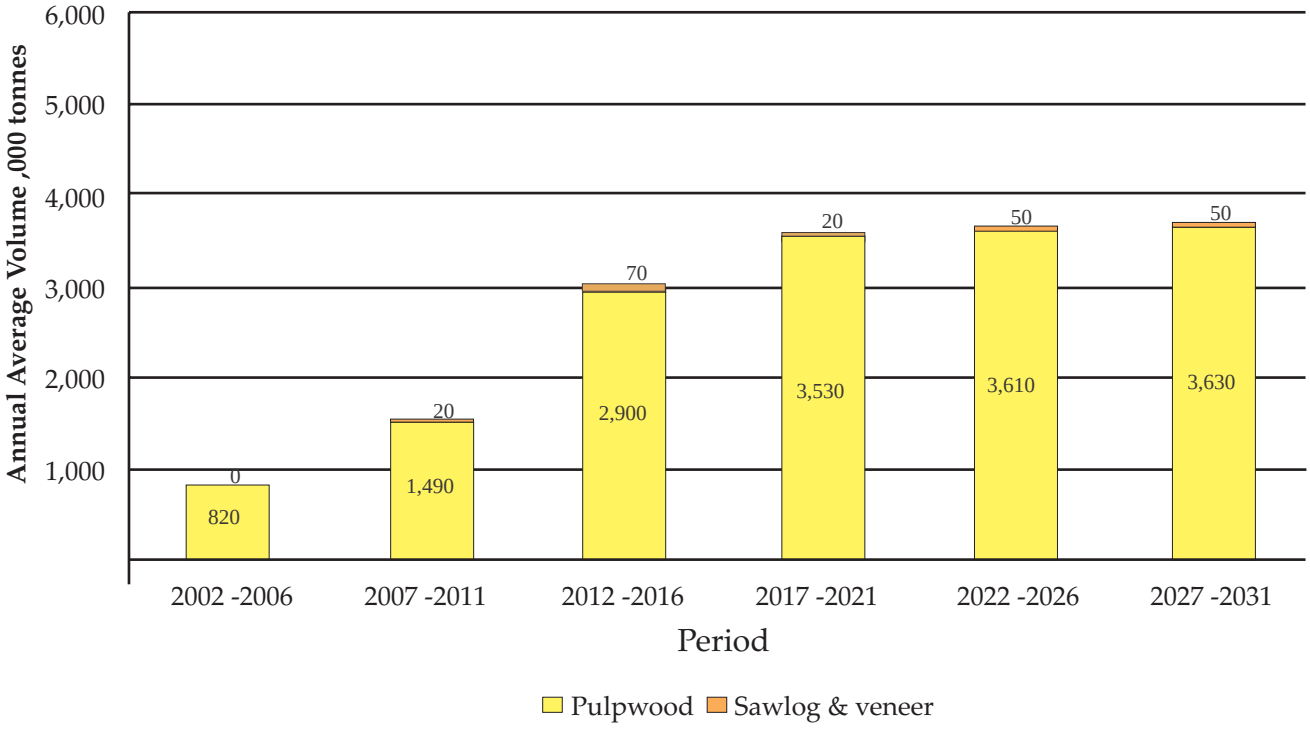

**Native forest hardwood wood flow estimates- all private property**



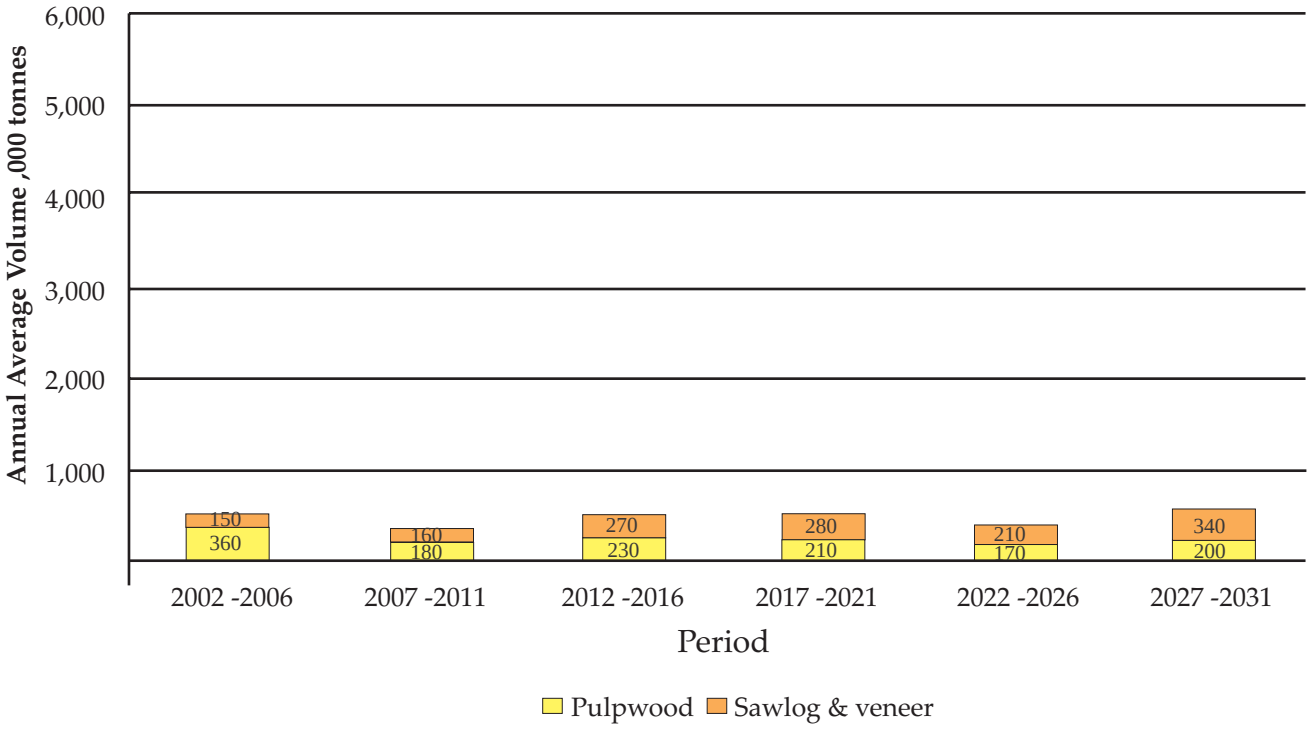
## Fast Facts

***Important Note:*** The information contained in the graphs below is based on and should be read in conjunction with some important assumptions - see *Key Assumptions & Things You Should Know* below and the body of the report for more details.

**Hardwood plantation wood flow estimates- all private property**




**Softwood plantation wood flow estimates- all private property**



## Key Assumptions & Things You Should Know

**The wood flows are estimated at the State level** - The wood flow estimates are not able to be broken into regional or specific product wood flows, as historically wood products are not necessarily delivered to the nearest processing plant due to a combination of factors including ownership, wood quality, marketing commitments and species characteristics.

**A general scenario was adopted** - that was considered to reflect possible market demands and activity levels following some general industry discussion. This assumed:

- The majority of private native forest clearfall would occur in the next (ie by 2016) 15 years. This was consistent with earlier wood flow work; reflected the need for revenue generation to private landowners as a priority to assist to convert unmanaged forests to regimes that allowed for more active future management of regrowth and regeneration; and recognised not all private native forest harvested could compete regarding quality with increasing amounts of hardwood plantation.
- The total pulp cut for partial harvesting was constrained to be relatively even in each period.
- Rainforest and secondary species harvest was constrained to less than 100,000 tonnes per annum.
- Hardwood plantation pulpwood was constrained to increase during the run to promote a steady wood flow.

**Only broad product classes are provided –** To aggregate data provided from different private growers, only broad product classes have been used – sawlog and veneer are aggregated, pulpwood includes both domestic and export grades.

**Not all private wood is assumed to be available** - Not all private owners wish to harvest their trees, so the total possible wood flow has to be discounted for this using the results of an owner's intent survey – detailed in the report below.

**Some forest areas are excluded for environmental reasons** - There are further discounts to the area that can be harvested due to environmental and planning constraints imposed through legislation such as the Forest Practices Act – detailed in the report below.

**No individual landowner data is provided** - The data is aggregated to maintain the confidentiality of data contributors, whose voluntary provision of private information on their expected wood flows forms the basis for the estimates.

**New plantings on non forest areas have been predicted** – Some private land currently not forested is converted into forest, especially as plantation, often in conjunction with industrial forestry activity, but also due to private landowners diversifying their crop mix, especially on steeper land – see Appendix 1.

**A range of plantation growth rates is used for plantations** – Geology, altitude and rainfall can influence the growth rate for a specific species, so a range of growth rates has been assumed for future plantings. Some data providers use complex models based on their extensive plantation datasets to predict future yields – see Appendix 1.

**Conversion to non forest following harvesting** – Some private land is not reforested following harvesting due to conversion to pasture, grazing, roads, dams or power lines – see Appendix 1.

**Many private forests will be selectively harvested rather than clearfelled** – Forest Practices Code and silvicultural requirements dictate that much of the higher elevation private forests and drier east coast private forests will only be selectively harvested rather than clearfelled – see Appendix 1.

Much of the data was based on estimates of plantation and native forest areas collated during 2002, with the most recent owners intent survey also carried out at that time.

## Introduction to the Process

Private Forests Tasmania (PFT) is a state government authority with functions and responsibilities defined in the Private Forests Act 1994 as amended.

These functions include "to maintain and update an inventory of private forests, prepare five-yearly reviews of private forests …"(Section 6.1 (f)). An output of these processes is the wood flow estimates in graphical and tabular format with the accompanying explanatory information.

## Results

The estimated wood flows for all private forest taking into account the relevant discounts for forest practices and owners intent discount for the non industrial private forests are provided in the *Fast Facts* section above.

## Objective of the Review

The review aims to provide a general strategic overview of the availability of wood products by general categories for the private forests in Tasmania over the next 30 years. The review process is repeated by PFT about every 5 years and this provides an opportunity for changes to land use, regimes or market opportunities to be incorporated.

## Outline of the Review Process

The Wood Flow Review process consists of four main activities:

1. Updating the forest area statement - to provide best estimates on forest areas, accounting where possible for changes due to harvesting and planting as well as normal growth.
2. Discounting the area statement - to take into account the fact that not all standing forest areas can or even may be harvested.
3. Allocating regimes and product yields to aggregated forest classes – to best reflect the general picture at a State wide level as there is incomplete data to quantify wood flows at a regional level.
4. Determining the potential wood flow – to provide an indication of longer term wood flow by general product classes under a scenario that provides some consistency in supply as a result of harvesting and regenerating the discounted area over time according to the predefined regimes and yields.

## Updating the Forest Area Statement

The resource estimation process was applied to the private non industrial forests, as the large industrial companies provided wood flow data for 2002 onwards for the private areas they owned or had harvesting control over. The large industrial forest areas were removed from the spatial dataset used as the basis for the wood flow estimates process. The large industrial companies provided statewide wood flows consistent with the final reporting format shown below.

This information has been aggregated as part of the agreement to maintain confidentiality of individual datasets, especially for the large industrial forest companies. Without their co-operation, it would not have been possible to provide statewide estimates as PFT has neither the growth nor demand data to model the large industrial wood flows.

**Table 1 Total area of private forests in Tasmania by broad forest type, 2002.**

| Broad Forest Type | Area (hectares) |
|---|---|
| Eucalypt Native Forest | 850,000 |
| Other Native forest | 50,000 |
| Hardwood Plantation | 100,000 |
| Softwood Plantation | 25,000 |
| **TOTAL Private Forest** | **1,025,000** |

Note that the area review process is not exhaustive due to constraints on imagery and skilled interpretative resources, but it is the best available information and is part of an ongoing updating process. Tasmania leads the other Australian states in this field with respect to mapping changes to private forest area.

### Discounting the area statement

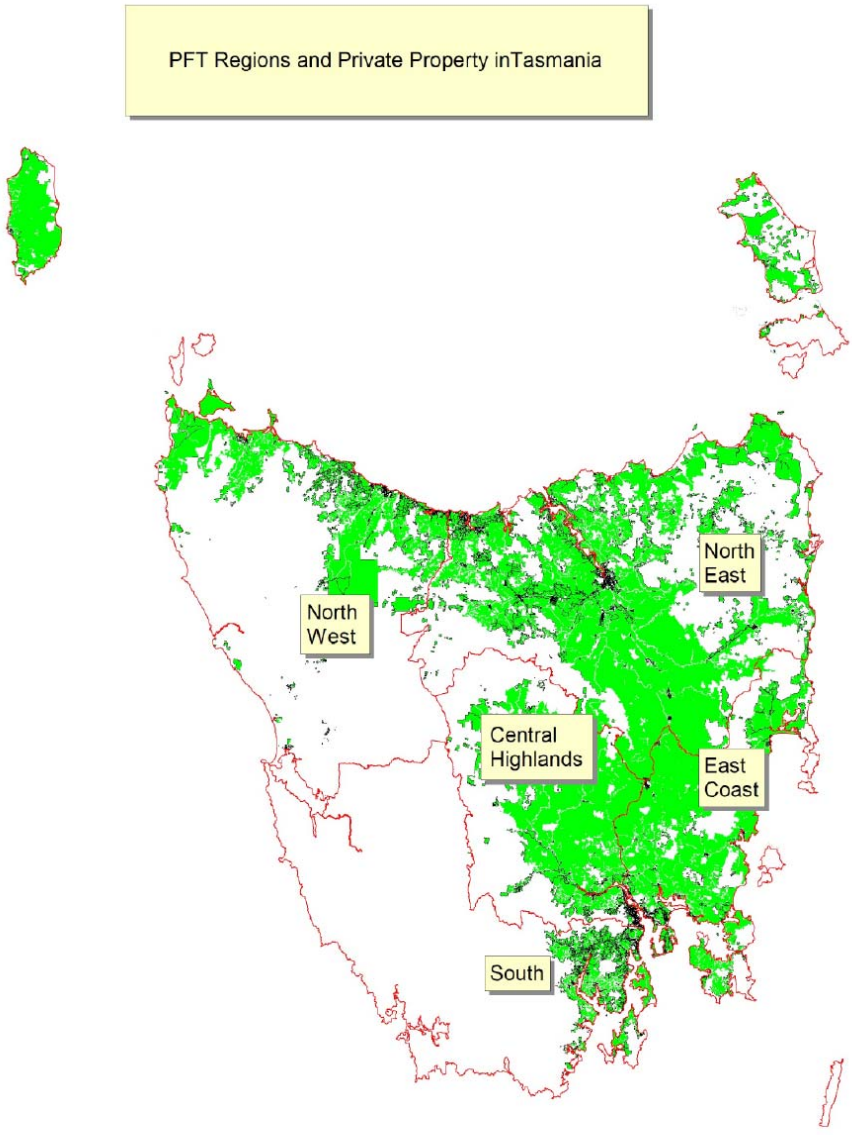
'Discount' is a term that is commonly applied in forest resource and inventory management to reduce either area or yield data due to management or technical limitations on harvesting.

The increased use of Geographic Information Systems (GIS) to monitor and report on changes to spatial information, especially vegetation, has assisted in quantifying constraints on harvesting at an operational level including those associated with the mandatory adherence to the *Forest Practices Act (1985)* as amended.

The area review process has applied discounts to the area statement using a combination of spatial and non spatial procedures. The general resource level nature of the review and the limitation on being able to accurately reflect individual landowner activities necessitated applying the discounts only at a regional or Statewide level. Regions are those used in previous reviews and are based on broad geographical and forest community boundaries (see Map 1).

Discounts to the area statement were applied to account for:

1. Environmental discounts – attributes of the landscape that restrict harvesting or regeneration activity.
2. Owners Intent Survey discounts - reflecting the different land management intentions of current owners.




**Map 1** ( right ) shows the 5 PFT regions (red borders) and private property(green) in Tasmania.

### Environmental discounts

Discount categories that related to static elements of the environment have remained unchanged from the previous Review, as no justification was identified that warranted change.

Slope, whilst a relatively small discount, has been determined from point sampling procedures used in the last review and takes into account the steeper proportion of private property in the south.

Stream buffers are required for water quality, with the size of the buffer dependent on regular water flow and the catchment area upstream of each point along a watercourse. The Forest Practices Code requires mandatory harvesting reserve widths for Class 1 to 3 streams as defined in the Code, resulting in applying a State wide discount based on previous sampling procedures.

Other Forest Practices Code discounts may be applied on a coupe basis to account for cultural heritage, fauna and flora conservation, landscape and geomorphological values. The duty of care conditions associated with the application of the Forest Practices Code assume a threshold 5% of private land that may be excluded from harvest without access to some compensation procedures. Consequently this threshold figure has been adopted for this review and is an increase from the 3% figure used in the previous review.

There are substantial up-front costs associated with the successful establishment of a plantation and so landowners very rarely plant areas that are precluded by environmental constraints from being harvested. Consequently, the plantation areas used for the review were assumed to be net of any environmental discount.

**Table 2 Summary of the % Environmental Area Discounts**

| | North West | North East | East Coast | Central Highlands | South |
|---|---|---|---|---|---|
| Slope | 0.8 | 2.4 | 2.2 | 4.6 | 11.2 |
| Streams | 7 | 7 | 7 | 7 | 7 |
| Forest Practices | 5 | 5 | 5 | 5 | 5 |
| **Totals** | **12.8** | **14.4** | **14.2** | **16.6** | **23.2** |

The statewide environmental area discount when weighted by the area of the relevant private forest in each PFT region is 15%.

### Owner Intent Survey Discounts

These discounts were added to the Environmental discounts for each region. The statewide Owners Intent Survey discount weighted by the relevant private forest in each PFT region is 31%.

The Owners Intent Survey discounts were not applied to:

- any areas within a Private Timber Reserve
- plantations
- any land owned or managed by the large industrial forest companies who provided future harvest estimates for this land which were then aggregated into the non industrial wood flows.

**Table 3 Summary of % Owners Intent Survey Area Discounts**

| | North West | North East | East Coast | Central Highlands | South |
|---|---|---|---|---|---|
| **Current Review Discounts** | **26** | **38** | **29** | **21** | **43** |

The level of harvest and market activity can influence the owner intent. The market conditions prior to the current survey were more positive than prior to the 1995 review and this may be a factor reflected in the reduction in the discount levels.

The survey was carried out by the University of Tasmania as part of a broader research project, with the responses analysed so that owners who thought they may harvest their trees at some time in the future for any reason were not included in the discount factor.

The survey data was analysed at a regional level for preliminary resource calculations involving reducing the area of forest available for resource modeling. The regional discounted areas were then aggregated, with the wood flow modelling based on a whole of state catchment.

Private Timber Reserves (PTRs) were created by Parliament in 1985 to enable landowners to have their land dedicated to long term forest management. Forest within a PTR was assumed to be available for harvest and so was excluded from the Owners Intent discount process. As at April 2005, about 386,000 hectares were reported as being included in PTRs.

### Allocating regimes and product yields to aggregated forest classes

The large industrial companies provided statewide wood flows consistent with the final reporting format shown below. They did not provide information on their regimes or product yields.

The experience and knowledge of a range of forest managers from the large industrial companies, forestry consultants and processors was collated by PFT to develop regimes and product yields for both the plantation and native forest harvesting.

### Determining the potential wood flow

The resource wood flow was modeled by a consultant using a commercially available linear programming optimisation tool called “Woodstock”. There were three types of forest modeled within Woodstock:

1. Native forest managed on a clearcut regime.
2. Native forest managed on a partial harvesting regime.
3. Plantations (hardwood and softwood) managed under a variety of thinning and clearcut regimes.

**Native Forest Managed on a Clearcut Regime**
Allocation of yields to native forest managed on a clearcut regime drew on the methodology and yield tables developed for previous private forest reviews. Sawlog and pulpwood yields were allocated according to PFT Region and also the PFT Forest Class that aggregates the standard photo interpretation of forest types by height and density. Some further detail is in Appendix 1.

**Native Forest Managed on a Partial Logging Regime**
Allocation of yields to native forest managed on a partially logged regime was derived from discussions with consultants and senior planning and supervisory staff in the large industrial companies in several regions of the State. Some further detail is in Appendix 1.

**Plantations**
Allocation of yields to plantations was derived from discussions with PFT regional staff based on local experience. The regimes developed were generalised to represent the major components of the non industrial plantation resource and provided differentiation between actively managed stands and those where little or no management had occurred.

The PFT Woodstock model includes a number of transitions from one forest type to another:

- New cleared land is planted to hardwood and softwood plantation;
- Existing plantation is replanted following harvesting to new plantations under a variety of regimes;
- Existing plantations are returned to native forest or non forest;
- Existing native forest is converted to a variety of hardwood and softwood plantation regimes;
- Existing plantation is re-seeded to native forest.

Transitions were also specified for forest treated in partial harvesting regimes.

Assumptions on the transitions, on a PFT Region basis, were developed by PFT and are derived from discussions with a range of regional staff based on their local experience. The transitions developed were generalised to represent the major components of the non industrial plantation resource.

**Yield Table used for non industrial private native forest modeling**

The process used yields from earlier modeling, unless there was evidence to support a change. The updates to the yields for partial harvest were based on expert opinion – PFT discussed options and likely harvest yields and products with a range of experienced harvesting supervisors and planners. Some further detail is in Appendix 1.

**Industrial Wood Flows**

All industrial company data was aggregated with the non industrial wood flows for final reporting to maintain confidentiality.

**Observations**

Aggregated woodflow is the sole output from the process, as data was not provided at a level to allow for regional flows.

The expected wood flows represent an estimate that will vary depending to a considerable extent on the stumpage paid to landowners – if a higher price is paid, then it is likely, or can be reasonably assumed, that there will be more private landowners willing to sell. An expectation that prices may increase or that harvesting options for native forest may become more restricted could also influence the total amount and the rate of supply from private non industrial forests.

The increased focus on plantations since the previous 1995 review is reflected in the greater total volume available and the increased amount of hardwood plantation wood. More recent developments that suggest the evolution of a clearwood and/or a knotty sawlog market for hardwood plantation will influence the amount of clearwood (for sawlog/veneer) and knotty sawlog available in future resource reviews.

**ACKNOWLEDGEMENTS**

PFT acknowledges the assistance from the large industrial forest companies, other statutory authorities and their inventory staff, as well as the co-operation of private landowners in the compilation of area, yield and wood flow data used in this Review.

## Appendix 1 Supplementary information

**Softwood Plantations** – a range of regimes was used that reflected the expected focus on both knotty and clearwood production. Site variability was incorporated by using a range of yield tables with a Mean Annual Increment (MAI in cubic metres per hectare per annum) from 12 in drier, poorer soil areas (where environmental and shelterbelt benefits play an important role in plantation management), to 31 in high rainfall, high quality basalt soil types.

**Hardwood Plantations** - a range of regimes was used that reflected the interest in pure pulp as well some interest in clearwood production. Site variability was incorporated by using a range of yield tables with a Mean Annual Increment (MAI in cubic metres per hectare per annum) from 10 in drier, poorer soil areas (where environmental and shelterbelt benefits play an important role in plantation management), to 28 in high rainfall, high quality basalt soil types.

**Native Forest Managed on a Partial Logging Regime** – a range of regimes involving some selection harvesting every 30 to 40 years was combined with expected growth rates with a Mean Annual Increment (MAI in cubic metres per hectare per annum) of 2 to 3.

**New Plantings and Conversion to Non forest** – though this is difficult to predict, some future non forest areas were assumed to be planted with some harvested forest not being replanted. The overall change involved an increase of about 4,000 hectares per annum. Some 5% of existing non industrially owned plantations were assumed to be converted to non forest at clearfall, with about 10% of native forest clearfelled not returned to forest.

DEPARTMENT *of* JUSTICE

**BACKGROUND PAPER**

# REVISED DRAFT STATE POLICY ON THE PROTECTION OF AGRICULTURAL LAND 2007

JULY 2008

Land Use Planning Branch

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## 1. BACKGROUND

### 1.1 Introduction

Tasmanian Sustainable Development Policies ('State Policies') are a core element of the State's Resource Management and Planning System and are provided through the *State Policies and Projects Act 1993*.

The *State Policy on the Protection of Agricultural Land 2000* came into effect on 6 October 2000. The purpose of the Policy is to foster sustainable agriculture in Tasmania by ensuring the continued productive capacity of the State's agricultural land resource.

The Policy requires that both prime and non-prime agricultural land is protected from conversion to non-agricultural use. This is to be achieved by implementing the Policy through local government planning schemes and other instruments that manage and control the use and development of agricultural land.

The State Government initiated the first periodic review of the Policy in August 2006. The aim of the review was to ensure that the Policy does not unreasonably restrict development on agricultural land, but efficiently and fairly protects the State's agricultural resource for the benefit of the Tasmanian community into the future.

The review Terms of Reference were to consider the following:

- The effectiveness of the Policy in protecting both prime and non-prime agricultural land from conversion to non-agricultural use;
- The effect of the Policy on the building of houses on small rural lots;
- The effect of the Policy on the subdivision of rural land;
- The effectiveness of the Policy in dealing with the issue of fettering (the restriction of agricultural uses through land use conflicts);
- The need for supporting guidelines or tools to assist the Policy's implementation; and
- Relevant matters arising from the Legislative Council Select Committee Inquiry into Planning Schemes.

A Steering Committee with State agency and Local Government Association of Tasmania (LGAT) representation was formed to oversee the review.

The review process involved substantial consultation with stakeholders, particularly local councils, and the general public

### 1.2 Review of State Policies

The *State Policies and Projects Act 1993* requires that all State Policies are periodically reviewed, to ensure they remain relevant and effective in their implementation. The responsible Minister for the purposes of the Act is the Premier.

The key steps in the review process are:

- The Minister considers what amendments might be needed to a State Policy. In the case of a major review such as the periodic review of the PAL Policy this will follow a significant public consultation process. In other cases a proposed amendment might only affect a Policy in a minor way.

- S.15A - the Minister gives a written direction to the Resource Planning and Development Commission (RPDC) to advise whether it considers that any proposed amendment constitutes a significant change to the State Policy.

- On receipt of the RPDC's advice, if the Minister decides that the referred amendment does not constitute a significant change, he or she may make the amendment by publishing details of it in the Gazette, and tabling

it in both Houses of Parliament, along with the Commission's advice.

- Where the Minister decides, on receipt of the RPDC's advice, that a referred amendment constitutes a significant change to the State Policy, he or she must direct the RPDC to prepare a report on the referred amendment.

- The RPDC must prepare the report, and in doing so, the provisions of sections 6,8,9,10,11 and 12 of the *State Policies and Projects Act 1993* apply as if the referred amendment was a draft State Policy.

- The first step in this reporting process, in accordance with sections 6 and 8, is to advertise and place the referred amendment on public display. The Act provides for a period of eight weeks for public representations to be made to the RPDC.

- The RPDC will then consider the representations made on the draft State Policy and may hold public hearings into the representations.

- RPDC must then prepare a report to the Minister on the draft State Policy (including any recommendations to modify), and publish notice of its report in the Gazette and make the report publicly available.

- Upon receipt of the RPDC's report on the draft State Policy, the Minister may recommend to the Governor the making of a new State Policy.

- The new State Policy must be approved by both Houses of Parliament and given public notification in the Gazette before it comes into effect.

## 2. AN OVERVIEW OF THE REVISED 2007 POLICY

### 2.1 Background

Assessment of the submissions and consideration of the issues raised during the review process indicated that the Policy did not require fundamental change but needed clarification and more consistent implementation through planning schemes.

Consequently, a broad approach to reviewing the Policy was established that emphasised the need for more consistent implementation of the Policy principles through planning schemes and sought to clarify the use of terms and concepts, simplify processes and only apply the Policy to land that can realistically be used for agriculture.

A draft policy 'package' was developed to address these issues and provide for a more effective and consistent implementation of the Policy across the State.

The policy package comprises three documents:

- A revised State Policy (the State Policy on the Protection of Agricultural Land 2007);
- An Implementation Guide to assist local councils to implement the 2007 Policy through planning schemes; and
- A set of Model Planning Scheme Provisions.

These documents are discussed in more detail in Sections 2.2 - 2.4 of this paper.

The Implementation Guide and Model Planning Scheme Provisions do not form part of the Policy itself and are not mandatory. It is intended that these documents are to serve as guidance tools for local councils and provide a 'best practice' methodology in implementing the 2007 Policy through planning schemes. The RPDC has agreed to examine and report on these documents as an adjunct to its formal reporting process on the 2007 Policy.

## 2.2 State Policy on the Protection of Agricultural Land 2007

The 2007 Policy builds upon the existing objectives, principles and definitions of the 2000 Policy. The amendments essentially fit into two categories:

(a) Clarifying the intent of the 2000 Policy to provide for more consistent interpretation and implementation; and

(b) The introduction of new themes and provisions to reinforce the effective implementation of the Policy.

These modifications are discussed in Sections 2.2.1 – 2.2.2.

### 2.2.1 Clarification of Terms and Concepts

A key aspect of the review process was to clarify terms and concepts used in the 2000 Policy in order to provide more certainty and consistency in the Policy's implementation.

#### 2.2.1.1 Definitions

***Agricultural Land***

The 2007 Policy provides a revised definition of agricultural land to ensure that the Policy is not applied to land areas that have already been compromised for agricultural use.

Agricultural land is defined in the 2007 Policy as: *'all land that is in agricultural use or has the potential for agricultural use that has not been zoned or developed for another use or would not be unduly restricted for agricultural use by its size, shape and proximity to adjoining non-agricultural uses.*'

The qualification in the definition to exclude land that has not been zoned or developed for other uses is to ensure that the Policy does not unnecessarily restrict development on rural land that may theoretically support agricultural use but where, in reality, such use would not be feasible or practical because of environmental factors, land size or adjacent land uses.

***Fettering***

A number of submissions referred to the issue of fettering and the absence of a definition for this in the 2000 Policy.

The 2007 Policy provides a definition for fettering as '*the prevention or restriction of agricultural uses or potential agricultural uses by the existence of a conflicting land use, usually residential, in the vicinity. "Fettering" may arise because agricultural practices causing noise, light, odour, dust, spray and other nuisances are incompatible with the amenity usually associated with residential land use. It may also arise from the potential impact of domestic animals and plants associated with residential use on adjacent agricultural uses.'*

The proposed definition is intended to minimise the potential for contention and assist in the interpretation of Principle 6 of the 2007 Policy.

***Prime Agricultural Land***

The 2007 Policy incorporates a reference to the revised edition (1999) of the Land Capability Handbook. The revised definition of 'prime agricultural land' now reads *'agricultural land classified as Class 1, 2 or 3 land based on the class definitions and methodology from the Land Capability Handbook, Second Edition, C J Grose, 1999, Department of Primary Industries, Water and Environment, Tasmania.'*

***Utilities***

Principle 4 of the 2000 Policy referred to 'public utilities'. However, the Policy did not provide a definition, which made it possible for 'public utilities' to be interpreted in a restrictive sense to refer only to utilities or infrastructure provided

by public institutions, typically State or local government. Consequently, the term 'utilities' replaces 'public utilities' in Principle 4 of the 2007 Policy to take account of the fact that an increasing number of private organisations now provide community infrastructure.

The accompanying definition also broadens the meaning of utilities to refer to any publicly accessible infrastructure regardless of whether it is provided by public or private institutions.

The 2007 Policy defines 'utilities' as '*the use of land for telecommunications; transmitting or distributing gas, oil, or power; transport networks; collecting, treating, transmitting, storing or distributing water; or collecting, treating, or disposing of storm or floodwater, sewage, or sullage. Examples are a gas, water or sewerage main; electrical substation; power line; pumping station; retarding basin; road; railway line; sewage treatment plant; water storage dam; storm or flood water drain and weir.*'

#### 2.2.1.2 Principles

While their intent is largely unaltered in the 2007 Policy, the principles of the 2000 Policy have been rearranged and revised to better clarify their meaning.

The revised principles, which build on and enhance the intent of those in the 2000 Policy, are listed below with a brief outline of the basis for inclusion in the Policy.

Principle 1 recognises the value of all agricultural land irrespective of whether it it is of prime or non-prime classification, and seeks to ensure that such land is not unreasonably fettered by non-agricultural use and development. This builds upon the concept previously covered in the 2000 Policy under Principles 5 and 6.

Principle 2 emphasises that prime agricultural land is a scarce and important State resource that is to be appropriately managed to ensure that it is not unnecessarily compromised by non-agricultural use or agricultural use that is not dependent on the soil as the growth medium (excluding plantation forestry). This expands upon Principle 1 of the 2000 Policy.

Principle 3 recognises that some forms of use and development on prime agricultural land may be directly associated with, and a subservient part of, an agricultural use and therefore is consistent with the intent of the Policy. This revised Principle expands and clarifies Principle 3 of the 2000 Policy.

Principle 4 clarifies that planning schemes are the mechanism to determine whether utilities can be allowed on prime agricultural land. This is a revision of Principle 4 of the 2000 Policy, which previously required referral to the RPDC to approve the development of utilities on prime agricultural land. The revised Principle also removes the concept of 'public utilities', replacing it with the broader term 'utilities', as discussed previously under 2.2.1.1.

Principle 6 is a new principle aimed at clarifying that residential use is not inconsistent with the Policy where it is required as part of an agricultural use, or where it does not unreasonably convert agricultural land or fetter agricultural use. This is a revision to Principle 2 of the 2000 Policy, which has at times been misinterpreted to mean that all forms of residential use and development were incompatible with the Policy.

Principle 8 reinforces the intent of Principle 5 of the 2000 Policy that planning schemes are the mechanism to determine the appropriate level of protection for non-prime agricultural land, taking into account its local and regional significance for agriculture.

Principle 9 clarifies that 'specified irrigation schemes' referred to in Principle 7 of the 2000 Policy are 'Irrigation Districts' proclaimed under Part 9 of the *Water Management Act 1999*, and not any

public or private irrigation scheme that is in existence.

Principle 10 clarifies that planning schemes cannot prohibit or require a discretionary permit for agriculture that depends on the soil in areas zoned for rural purposes. This is consistent with the Objectives of the 2000 Policy. However, Principle 10 does not apply to the establishment of plantation forestry on prime agricultural land, which is the subject of a new principle (Principle 11) discussed in Section 2.2.2.

### 2.2.2 New Themes and Provisions

The following definitions and principles have been incorporated into the 2007 Policy to more effectively promote the overall purpose of the 2000 Policy.

***Controlled Environment Agriculture***

The 2007 Policy recognises the changing nature and range of agricultural practices emerging in the Tasmania. There was concern that the 2000 State Policy could restrict modern and contemporary agricultural and farming practices, such as Controlled Environment Agriculture (CEA), as they do not necessarily require soil as the growth medium. Accordingly, a new principle (Principle 5) has been included in the 2007 Policy to allow the development of CEA on prime agricultural land, where the location is reasonably required for operational efficiency and the scale of the development, and potential negative impacts on the surrounding environment are minimised.

CEA is defined in the 2007 Policy as '*an agricultural use carried out within some form of built structure whether temporary or permanent which mitigates the effect of the natural environment and climate. These include production techniques that may or may not use imported growth mediums. Examples of controlled environment agriculture include greenhouses, polythene covered structures, and hydroponic facilities.'*

The definition of 'agricultural use' has also been amended to include CEA to ensure it is clearly accepted as a form of agriculture, and not considered as a non-agricultural use.

***Plantation Forestry***

Although plantation forestry is defined as an agricultural use and is dependent on the soil as a growth medium, the length of time associated with timber rotation, and subsequent inflexibility of the land use, does not necessarily make the best use of the relatively rare prime agricultural land.

Principle 11 of the 2007 Policy allows planning schemes to deal separately with the issue of plantations. This is on the basis that timber rotations of over ten years may inappropriately exclude prime land from food crops, which can be more flexibly varied to meet market needs and cannot be successfully grown on non-prime land. This is consistent with the objectives of the 2000 Policy in ensuring that the productive capacity of agricultural land is appropriately recognised and protected. It should be noted that plantations have been established on only a small area of prime agricultural land across the State, with the vast majority occupying areas of non-prime land.

However, by virtue of the definition of plantation forestry in the 2007 Policy, Principle 11 does not prohibit the establishment of new plantations that are a subservient part of, and directly related to, other farming operations, such as the planting of wind breaks, woodlots or activities for environmental management purposes (such as salinity or erosion control). All such plantations may be harvested fully or in part at a later date. This is consistent with Principle 3 of the 2007 Policy.

Principle 11 provides each local council with the opportunity to consider whether new plantations should be allowed on prime agricultural land. It enables them to make this judgement based on the size and location of prime agricultural land and

existing plantations, the practical difficulties associated with managing plantations, and the complexity of land classification across a single farm.

The majority of these difficulties arise because of the mosaic of land classification across the State. Areas of prime agricultural land rarely match title boundaries, and in many cases, small areas of prime land are surrounded by non-prime land. If new plantations are prohibited under all circumstances on the prime land, impractical farming areas may result. If a plantation is required to strictly follow the boundaries of the changing land classification it would have significant effects on the economies and logistics of both farming and plantation forestry.

The problem of determining whether land is prime or non-prime can be avoided by using property management plans. The development of comprehensive property management plans (PMPs) is increasingly being used for a variety of land management and environmental purposes. PMPs are used to develop and document a portfolio of integrated farming activity for an entire property, including the management of areas and offsets for conservation purposes (refer Principle 12 of the 2007 Policy).

PMPs provide a mechanism for sustainable farm management and best utilisation of the land resource, and may soon be subject to a statewide property management framework.

Where PMPs are subject to some form of approval, these would supersede the need for assessment of land capability for any plantation component, where that planting does not exceed a certain proportion of the property management plan area. In these circumstances, plantation forestry becomes one component of a whole-of-farm approach based on detailed land capability analysis and other relevant factors.

Consistent with Principles 11 and 12, the 2007 Policy provides definitions for plantation forestry and property management plans.

Plantation forestry is defined as *'the use of land for planting, management and harvesting of trees predominantly for commercial wood production, including the preparation of land for planting but does not include the milling or processing of timber, or the planting or management of areas of land for shelter belts, woodlots, erosion or salinity control or other environmental management purposes, or other activity directly associated with and subservient to another form of agricultural use.'*

A property management plan is defined as *'an integrated plan for part or the whole of a farm or number of conjoined farms, prepared by a suitably qualified person which details property design and management by matching economic production to the property's ecological characteristics and resources.'*

The 2007 Policy also provides for transitional arrangements, which recognise that the introduction of a prohibition on new plantations might disadvantage some land owners and forestry interests.

The transitional arrangements allow for a six-month grace period for the establishment of new plantations where there is demonstrable proof of an intention to establish a plantation during that period (such as applying for the status of a private timber reserve).

***Removal of RPDC sign-off process for the development of prime agricultural for non-agricultural use***

Principle 2 of the 2000 Policy indicates that non-agricultural uses alienate prime agricultural land. Principle 4 of the 2000 Policy provides exceptions for proposals of significant economic benefit to the region, where the RPDC confirms that there is an overriding community benefit.

Under the 2000 Policy the RPDC is required to confirm such benefit before

allowing a planning authority to consider an application.

The 2000 Policy requires this type of proposal to pass two tests. It must comply with the planning scheme or amendment, and have approval from the RPDC confirming an overriding community benefit.

Principle 7 of the 2007 Policy removes the preliminary RPDC sign-off and replaces it with the normal assessment process associated with planning scheme amendments.

This allows for proposals of significant benefit to the region to be considered as an amendment to a planning scheme taking into account the social, environmental, and economic costs and benefits to the community. In this way, the RPDC is still responsible for the approval of such proposals, but through a planning scheme amendment process only.

### 2.3 Implementation Guide

Many local government submissions received during the consultation period highlighted the need for supporting material to assist to implement the Policy through their planning schemes more effectively and consistently.

The Implementation Guide has been devised to assist planning authorities to identify methods and approaches to achieve the requirements of the 2007 Policy, and provides direction on the amendment of existing planning schemes and preparation of new ones.

It provides for consistency with the Common Key Elements Template for Planning Schemes, introduced by Planning Directive No. 1.

The Implementation Guide is structured into three parts:

Part 1 Outlines a method for determining the land to which the Policy applies.

Part 2 Outlines the parts of planning schemes that can be used to deliver the principles of the Policy.

Part 3 Outlines an approach for reviewing planning schemes to determine the extent of changes that may be necessary to achieve compliance with the Policy.

### 2.4 Model Planning Scheme Provisions

The Model Planning Scheme Provisions provide examples for planning authorities on how to implement the 2007 Policy through their planning schemes. They provide a benchmark for the review of existing planning schemes and the preparation of new ones.

There are a variety of provisions in current planning schemes that address the 2000 Policy, and these have been considered in the preparation of the model provisions. The model provisions are intended to achieve the requirements of the Policy across all planning schemes with greater certainty and more consistency.

The model provisions seek to ensure that development of agricultural land is not unreasonably restricted, while efficiently and fairly protecting Tasmania's agricultural land resource in accordance with the objectives and principles of the Policy.

# *State Policy on the Protection of Agricultural Land 2007*

## 1. PURPOSE

The State Policy on the Protection of Agricultural Land is to foster sustainable agriculture in Tasmania by ensuring the continued productive capacity of the State's agricultural land resource.

## 2. OBJECTIVES

2.1 To provide a consistent framework for planning decisions involving agricultural land by ensuring that the productive capacity of agricultural land is appropriately recognised and protected in all relevant planning instruments regulating the use and development of agricultural land.

2.2 To foster the sustainable development of agriculture in Tasmania by:

(a) Enabling farmers to undertake agricultural activities without being unreasonably constrained by conflicts with adjoining non-agricultural land uses; and

(b) Providing greater direction and certainty for landowners, developers, land managers and the community in the planning instruments regulating the use and development of agricultural land

## 3. PRINCIPLES

The following principles will guide outcomes that give effect to this Policy. No one principle should be read in isolation from the others to imply a particular action or consequence. The principles are:

1. All agricultural land is a valuable resource for Tasmania and should not be unreasonably fettered by non-agricultural use and development.

2. Prime agricultural land is a resource to be managed to ensure use and development does not result in unnecessary conversion to non-agricultural use or agricultural use not dependent on the soil as the growth medium.

3. Use or development of prime agricultural land that is directly associated with and a subservient part of an agricultural use of that land is not inconsistent with this Policy.

4. Planning Schemes may allow utilities on prime agricultural land where the amount of land converted is kept to the minimum, it does not unreasonably fetter agricultural use, and where the location is reasonably required for the utility or extractive industry to operate efficiently.

5. Planning Schemes may allow controlled environment agriculture on prime agricultural land where the location is reasonably required for operational efficiency, and the scale of development and the negative impacts on the surrounding environment are minimised.

6. Residential use is not inconsistent with this Policy where it is required as part of an agricultural use or where it does not unreasonably convert agricultural land and does not fetter agricultural use.

7. Proposals of significant benefit to the region that may cause prime agricultural land to be converted to non-agricultural use or agricultural use not dependent on the soil as a growth medium, and which are not covered by Principles 3, 4, 5 or 6, will require an amendment to a planning scheme based on consideration of the social, environmental and economic costs and benefits to the community.

8. The protection of non-prime agricultural land from conversion to non-agricultural use will be determined through planning schemes taking into account the local and regional significance of that land for agricultural use.

9. Planning schemes must make provisions for the appropriate protection of non-prime agricultural land within Irrigation Districts proclaimed under Part 9 of the *Water Management Act 1999*.

10. Planning schemes must not prohibit or require a discretionary permit for an agricultural use on land zoned for rural purposes where that use depends on the soil as the growth medium, except as prescribed in Principle 11.

11. New plantation forestry must not be established on prime agricultural land unless a planning scheme reviewed in line with this Policy provides otherwise. Planning scheme provisions must take into account the operational practicalities of plantation management, the size of the areas of prime agricultural land, their location in relation to areas of non-prime agricultural land and existing plantation forestry, and the existence of property management plans for the land.

12. Property management plans which integrate a range of different farm operations are encouraged and will be recognised in planning schemes as appropriate means of providing for the sustainable management of the agricultural resource.

## 4. GUIDELINES

The Resource Planning and Development Commission may, with the approval of the Minister, issue guidelines consistent with the terms of this Policy and confined to assisting planning authorities in dealing with the implementation of the Policy. A planning authority must comply with any guideline that has been issued under this Policy.

## 5. TRANSITIONAL ARRANGEMENTS

Principle 11 of this Policy does not apply to new Plantation Forestry on any land provided that within 6 months of this Policy coming into force:

a) the land owner has applied for status as a Private Timber Reserve; or

b) a Forest Practices Plan for the land has been certified or commenced but not yet certified, or

c) there is demonstrable evidence that a legally binding contract to purchase or lease the land for the purpose of establishing new Plantation Forestry has been entered into or that extensive negotiations to conclude such a contract have been undertaken

## 6. AUTHORITY

This State Policy is prepared pursuant to the *State Policies and Projects Act 1993*.

## 7. APPLICATION

This Policy applies to all agricultural land in Tasmania.

A decision made in accordance with the provisions of a planning scheme approved under the *Land Use Planning and Approvals Act 1993* as being in accordance with this Policy, is taken as being in accordance with this Policy.

## 8. DEFINITIONS

In this Policy, unless the contrary intention appears:

**Agricultural land**

"agricultural land" means all land that is in agricultural use or has the potential for agricultural use that has not been zoned or developed for another use or would not be unduly restricted for agricultural use by its size, shape and proximity to adjoining non-agricultural uses.

**Agricultural use**

"agricultural use" means animal or crop production and includes controlled environment agriculture and plantation forestry.

**Controlled environment agriculture**

“controlled environment agriculture” means an agricultural use carried out within some form of built structure whether temporary or permanent which mitigates the effect of the natural environment and climate. These include production techniques that may or may not use imported growth mediums. Examples of controlled environment agriculture include greenhouses, polythene covered structures, and hydroponic facilities.

**Fettering**

“fettering” means the prevention or restriction of agricultural uses or potential agricultural uses by the existence of a conflicting land use, usually residential, in the vicinity. “Fettering” may arise because agricultural practices causing noise, light, odour, dust, spray and other nuisances are incompatible with the amenity usually associated with residential land use. It may also arise from the potential impact of domestic animals and plants associated with residential use on adjacent agricultural uses.

**Land**

"land" means land as defined in the Land Use Planning and Approvals Act 1993.

**Planning scheme**

"planning scheme" means any planning scheme in force under section 29 of the Land Use Planning and Approvals Act 1993.

**Plantation forestry**

"plantation forestry" means the use of land for planting, management and harvesting of trees predominantly for commercial wood production, including the preparation of land for planting but does not include the milling or processing of timber, or the planting or management of areas of land for shelter belts, woodlots, erosion or salinity control or other environmental management purposes, or other activity directly associated with and subservient to another form of agricultural use.

**Prime agricultural land**

"prime agricultural land" means agricultural land classified as Class 1, 2 or 3 land based on the class definitions and methodology from the Land Capability Handbook, Second Edition, C J Grose, 1999, Department of Primary Industries, Water and Environment, Tasmania.

**Property management plan**

“property management plan” means an integrated plan for part or the whole of a farm or number of conjoined farms, prepared by a suitably qualified person which details property design and management by matching economic production to the property’s ecological characteristics and resources.”

**Utilities**

“utilities” means use of land for telecommunications; transmitting or distributing gas, oil, or power; transport networks; collecting, treating, transmitting, storing or distributing water; or collecting, treating, or disposing of storm or floodwater, sewage, or sullage. Examples are a gas, water or sewerage main; electrical substation; power line; pumping station; retarding basin; road; railway line; sewage treatment plant; water storage dam; storm or flood water drain and weir.

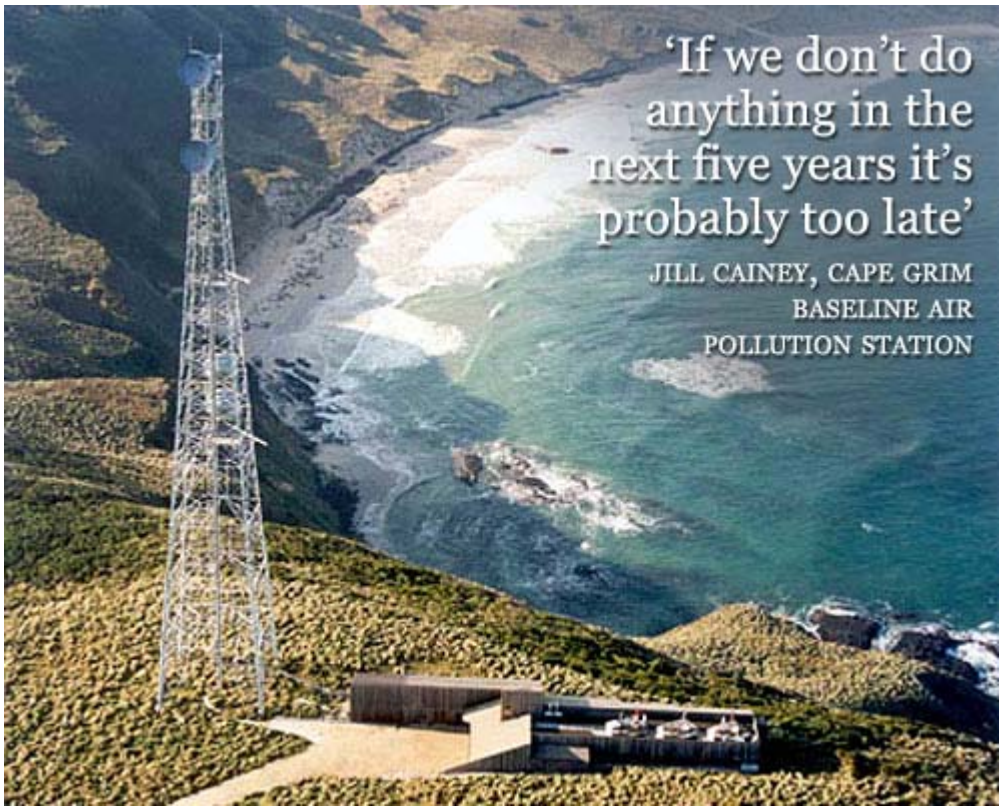
The FIRSTPOST August 3, 2008

# Two years to climate change meltdown

## NICHOLAS SHAKESPEARE on the shocking truth revealed by tests on Tasmania's pure air

Once again, the G8 leaders have disappointed environmentalists by failing to set tough goals for CO2 emissions. Yet anyone who believes that the world can afford to drag its feet any further should make a trip to Australia, where an English scientist called Jill Cainey is in charge of the Cape Grim Baseline Air Pollution Station in north-west Tasmania. As Cainey puts it: "Whether you think there's a problem with climate change largely depends on whether you have water. If you have water, you don't think there's a problem. If you don't have water, you do."

Cape Grim lives up to its name. It falls 308 feet to a windswept sea and feels like the edge of the world, but




the information sifted on its clifftop has dramatic implications for our planet. The wind analysed in Cainey's flasks - "like fat glass sausages" - is judged the purest in the world, enabling her to monitor global levels of pollution.

This April I had a conversation with Cainey *(right)* that I count as one of the most significant I can recall. I'd last spoken to her five years ago, when she was not at liberty to make a statement on climate change, Australia not having signed the Kyoto Protocol (it did so this year). But she did tell me that concentrations of carbon dioxide had risen from 330 parts per million in 1983 to 372ppm in 2003. The danger level, she said then, was 400.

When I contacted her again on April 23, 2008, she told me the CO2 level had since risen a further ten parts to 382ppm. And she's no longer inhibited in what she

*'The earth is still going to be here. The question is how much life do we take with us when we go'*

says.

The climate change that we experience today is the result, explains Cainey, of carbon dioxide emissions from 30 years ago. The most recent measurement of these emissions taken at Cape Grim shows that we haven't modified our behaviour, quite the opposite.

Australia is particularly interesting for scientists like Cainey because the results of climate change are manifest. A few miles along the coast from Cape Grim, sea-level rises have caused tracts of land to become saline, no longer productive. The impact of the melting ice cap is not the only phenomenon that concerns Cainey. "We don't know how plankton will respond when the ocean desalinifies; how trees and forests are going to respond, how crops."

One example: the oceans are becoming more acidic, which means that plankton production is

down. "Consequently less krill, less bigger fish." Then there's the fact that ocean currents control our weather. Farmers on Tasmania's east coast (where I live half the year) have not had water in a year. They're aware that the problem is massive.

Cainey goes on: "In the broader scheme of things, the earth is still going to be here. The question is how much life do we take with us when we go. If we don't do anything in the next two to five years to change our behaviour and stop carbon emissions, it's probably too late." I repeat this sentence because it is a sentence of death that I have not heard issued before. "*If we don't do anything in the next two to five years to change our behaviour and stop carbon emissions, it's probably too late*."

The need to alter radically and abruptly our behaviour is pressing, but even before the disappointing news from the G8, Cainey was not

*'If we don't do anything in the next five years to stop CO2 emissions, it's probably too late'*

optimistic. "I was at a New Zealand carbon cycle meeting and it left me depressed. How long it takes to agree for a certain wording used in a joint statement - whether it's 'human-induced' as opposed to 'natural variation' - seems more important than doing anything about it. We're fiddling with language when we should be fiddling with our behaviour."

Our conversation leaves me with an undeniable picture of rising sea levels, salinified crop fields and centuries-long drought.

Meanwhile, Cainey has this image for a situation that involves us all: "You're sitting in your canoe in open water, nowhere near land, and it springs a leak, and you sit there and argue about whether to plug the hole with a piece of wood or cloth, and only one thing will happen unless you fix it: the canoe will sink. We're just arguing about what we might do and not fixing it." ■

FIRST POSTED JULY 10, 2008

**http://www.thefirstpost.co.uk/44810,opinion,two-years-to-climate-change-meltdown**

# LAND TENURE STATISTICS FOR TASMANIA - at 1st JAN 2008

These statistics relate to the terrestial part (excluding estuarine waters and land below HWM) of Tasmania including offshore islands and Macquarie Island. Areas have been calculated from LIST data sets and have been rounded to the nearest 1,000ha. Note that Reserves are generally proclaimed to Low Water Mark and may also include areas of State Waters therefore the given area may be less than the proclaimed area. There are approximately 42,000 ha of reserves on public land (excluding marine nature reserves) below HWM. Permission must be sought if these figures are to be quoted or incorporated into any report or publication by contacting: tasmap@dpiw.tas.dov.au

| Classification | Land Area (ha) | Percentage of Tasmania's Land Area |
|---|---|---|
| **Nature Conservation Act Reserves on Public Land (2,344,000ha total - 34.4%)** | | |
| Conservation Area | 528,000 | 7.8 |
| Game Reserve | 13,000 | 0.2 |
| Historic Site | 9,000 | 0.1 |
| National Park | 1,412,000 | 20.7 |
| Nature Recreation Area | 66,000 | 1.0 |
| Nature Reserve (Including Macquarie Island Nature Reserve 12,400ha) | 35,000 | 0.5 |
| Regional Reserve | 237,000 | 3.5 |
| State Reserve | 44,000 | 0.6 |
| | | |
| **Forestry Act Land (1,485,000ha total - 21.8%)** | | |
| Forest Reserve | 222,000 | 3.3 |
| State Forest (excluding Forest Reserves) | 1,263,000 | 18.6 |
| | | |
| **Other land managed by State Government** | | |
| Wellington Park (Includes Council, Crown Land & Public Reserve) | 18,000 | 0.3 |
| Crown Lands Act Public Reserves | 24,000 | 0.4 |
| Crown Land (not reserved but may be partially leased or licenced) | 104,000 | 1.5 |
| Other State Government Agency non reserved Land | 27,000 | 0.4 |
| State Government GBE and company land (ex HEC land) | 3,000 | 0.1 |
| Unreserved Hydro Electric Corporation Land | 66,000 | 1.0 |
| | | |
| Local Government Land (ex Wellington Park) | 18,000 | 0.3 |
| Commonwealth Owned Land (Including 8,654ha of Defence Land) | 10,000 | 0.1 |
| | | |
| Private Property | 2,651,000 | 38.9 |
| | | |
| Road and Railway Corridors (may be owned by State or Local Govt) | 34,000 | 0.5 |
| Other Land not categorised including Lakes | 26,000 | 0.4 |
| **TOTAL** | **6,810,000** | **100.0** |

## Other Tenure and Reserve Statistics

These areas will overlap other areas in the table above and may include areas of water

| Category | Area (ha) |
|---|---|
| Crown Leases | 44,000 |
| Marine Leases | 6,000 |
| Crown Licences | 17,000 |
| Marine Nature Reserves (Incl Macquarie Is Marine Nat Res 74,700ha) | 123,000 |
| | |
| Private Sanctuary (Nature Conservation Act) | 5,000 |
| Private Nature Reserve (Nature Conservation Act) | 2,000 |
| Conservation Covenants (Can overlap Priv. Sanct. or Priv. Nat. Res) | 41,000 |
| World Heritage Areas (Overlaps Nature Conservation Act Reserves) | 1,358,000 |