A Submission By The Western Australian Department Of Conservation And Land Management (CALM)

To

THE DEPARTMENT OF PRIMARY INDUSTRIES AND ENERGY

On

REVIEW OF TAXATION ARRANGEMENTS RELATING TO PREVENTION AND TREATMENT OF LAND DEGRADATION

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

A Submission By The Western Australian Department Of Conservation And Land Management (CALM)

To

THE DEPARTMENT OF PRIMARY INDUSTRIES AND ENERGY

On

REVIEW OF TAXATION ARRANGEMENTS RELATING TO PREVENTION AND TREATMENT OF LAND DEGRADATION

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

INTRODUCTION

CALM welcomes the opportunity of making this submission because of serious, widespread economic and environmental implications to Australia as a nation of land degradation, with the usual associated degradation of waterways.

CALM has had a close scientific and commercial involvement in the understanding and rehabilitation of degraded land in Western Australia. It has played a major role in bringing into existence a company, Tree Fund Ltd, which will be the management company of what is generally known as Tree Trust - a concept for growing trees on farmland (and other land cleared prior to 1988) with the dual objectives of rehabilitating degraded land and waterways and creating commercial wood fibre resources. During the gestation period of Tree Trust several commercial hurdles have been identified and these will be reflected later in this submission.

CALM seeks to present a south-west Western Australian perspective and foreshadow the need for a regional approach within a general framework of Federal policy to turn back land degradation.

1. THE PROBLEM

In the south-west of Western Australia, salt is stored in much of the soil profile.

Land clearing has caused destruction of tree root systems which were responsible for maintaining a balance in ground watertable levels. Since land clearing, watertables have risen, bringing salty water into creeks and rivers and, in many places, to the surface of farm paddocks.

Salt seepage areas are increasing, thus increasing the area of farmland going out of agricultural production.

In parallel with this problem is the problem of increased surface runoff from cleared land, often causing severe soil erosion and washing salty seepage water into streams, rivers and dams.

Soil erosion caused by wind is often another problem concurrent with excessive land clearing.

In some agricultural areas, remnant vegetation is too small to be self-sustaining and, after steady decline, is unable to provide protection for farm animals (which lose productivity) or habitat for native flora and fauna.

Apart from declining farm production and productivity over large areas of the country, many water catchment systems are experiencing, or have experienced, devastating increases in salinity. Many rivers and even dams now have salinity levels in excess of that recommended for human consumption.

In the south-west of Western Australia, an environmental problem associated with land degradation is eutrophication - a process in which the waters in estuaries and harbours grow more and more algae after receiving increased river flow laden with residual fertiliser from cleared land. This has led to loss of aesthetic, recreational and commercial values.

In Western Australia, it is estimated by CSIRO that 25,000 ha of agricultural land goes out of production annually with an annual loss of income increasing by over $3 million each year.

Unaddressed, the long-term effect will see reduced national income, reduced tax receipts by government, and a devastated landscape with immeasurable cost implications for the nation.

See Appendix 1 - Illustrations of the Problem.

2. *PHYSICAL SOLUTIONS*

It has been scientifically demonstrated that re-establishing forest on a patchwork quilt basis on 20-40% of the cleared area will lower watertables sufficiently to redress the problem almost completely.

In particular, catchment or region planting should take place after careful study of the sites available for establishing plantations. Site assessments should produce specific information on subterranean water flows, salinity levels in soil and water, soil, and the geology of the area generally. Fertiliser history is also important; likewise rainfall, temperature and solar radiation characteristics.

It must be noted that tree growing on some sites can be counter-productive to the object of reducing stream salinity. These are sites where salt storage is low and which are contributing good subterranean and/or surface flows of fresh water to a catchment system. Additional trees in this situation can restrict surface flow and consume fresh groundwater, leading to an increase in dam and stream salinity levels because of the loss of the diluting fresh water inflow.

However, overall it is universally acknowledged that a professionally planned tree growing program will produce highly meaningful improvements in degraded land and waterways.

Engineering solutions, such as installation of bores and pumps, will lower watertable levels, but are expensive and impractical in a macro context. They do not provide shelter for farm animals and natural fauna and they do not reduce wind erosion, produce a wood fibre resource or possess the aesthetic qualities of trees.

See Appendix 2 - Illustration of Solutions.

3. *A COMMUNITY APPROACH*

Government or private sector?

Given that the cost of establishing and maintaining a hectare of plantation over 10 years is generally greater than the market value of a hectare of farmland, it is little wonder neither farmers/landowners nor governments have rushed to finance plantations for the sake of environmental benefits alone. Cashflow in developing a plantation is clearly negative even if taking into account the commercial benefits of improving farm production and possible increased government revenue from the sale of potable water.

It is not intended that a debate on government versus private sector funding of land and waterway rehabilitation be developed; rather it is proposed that environmental rehabilitation be recognised as a community problem and that governments as well as individuals and interest groups represent the community.

In short, a mix of private and public inputs is proposed on a regional basis to impact on the need.

4. *PLANTATIONS IN AUSTRALIA*

4.1 General

Plantation forestry in Australia has a chequered history; it has done best in regions with sawn timber shortages and suitable soils and climate. Plantations have been dominated by softwoods, whose growth rates and sawing performance exceed traditional commercial eucalypts considerably. Generally the Federal Government has provided assistance in their financing either through the tax mechanism or through direct grants to the States.

In recent years, both the tax system and grants system have changed so that investment in plantations is now less attractive to investors.

4.2 Rehabilitation plantations with commercial prospects

Commercial success in plantations requires all or most of the following

a) a sustained long-term market;

b) suitable selling prices for products;

c) land availability for planting at suitable cost;

d) soils, rainfall and climate that sustain suitable growth rates;

e) professional skill, management and infrastructure to ensure work is carried out adequately and at low enough cost;

f) an ability to respond appropriately to natural occurrences, such as fire and biological attacks on the developing plantation;

g) government incentives which stimulate investment in forestry.

Western Australia is effectively self-sufficient in sawn timber. Extending the pine plantation program significantly would therefore have doubtful commercial value. Further, pines are not as tolerant as eucalypts to a range of Australian climates and soils.

4.3 A unique opportunity in Western Australia

In Western Australia, an exciting prospect has been recognised. It stems from a number of occurrences:

a) the realisation that there is a sizeable apparent world shortage of quality hardwood fibre for paper making, especially true of Asia;

b) an outstanding potential for WA farmland to grow the splendid pulp fibre-producing tree, *Eucalyptus globulus,* on a large scale and close to ports;

c) the proximity of WA to Asia with consequent freight advantages over competitive regions;

d) WA possesses excellent infrastructure, technology and political stability.

The concept of growing *E. globulus* on a range of sites on a large scale (say, 300,000 ha established in perpetuity) gives promise of a solution to environmental degradation and a long-term commercial return. In fact, it gives promise of a new export industry and new onshore forestry operations with the associated employment, tax revenue and

overseas income factors. This proposed plantation area is less than 20% of farmland in the south-west of Western Australia.

For the reasons given in Section 6 of this submission, it is generally considered that a large-scale eucalypt plantation regime on farmland cannot be privately financed without government assistance and without clarification of government policy.

5. *FUNDING REQUIREMENTS AND RATES OF RETURN*

Given that one hectare of plantation just prior to harvest may have cost an investor/farmer between $2,300 and $4,200 depending on the rate of inflation, whether the figure includes interest costs and the tax effects of plantation contributions, it is clear that a major cash outgoing is incurred over a long period (say, 10-12 years) without income.

The internal rates of return (IRR) vary depending on the tax position of the investor and on inflation, gearing and interest rates.

However, the following positions are indicative, given a crop rotation period of 10-11 years, MAI of 20 m^3/ha/annum and a log selling price of around $A28/$m^3$ s.u.b. standing.

5.1 Overseas investor

- no Australian income in years prior to first harvest
- after Australian tax paid on income from trees @ 39%
- zero inflation
- zero gearing
- qualifying as primary producer

real 9.3%

5.2 Australian investor

- ordinarily paying tax on other income
- after tax @ 39%
- paying plantation management fees and land rent
- inflation 7%
- zero gearing
- qualifying as primary producer

real 11.2%
nominal 18.2%

5.3 Australian investor

- paying provisional tax on other income
- after tax @ 39%
- paying plantation management fees and land rent
- inflation 7%
- zero gearing
- qualifying as primary producer

real 12.9%
nominal 19.9%

5.4 Farmer/Landowner

- paying tax
- after tax @ 39%
- not charging land rent
- zero gearing
- inflation 7%
- qualifying as primary producer

real 16.4%
nominal 23.4%

6. *PROBLEMS IN FINANCING*

6.1 Farmers

Many landowners/farmers in the south-west of Western Australia are not especially cashed up and not paying substantial taxes.

Farmers are not establishing plantation pulpwood for profit because of:

a) the cash outgoings required;

b) the insignificance of tax deductibility (because many are paying a low tax);

c) the perceived lack of access to markets;

d) the perceived selling price of pulpwood ($A10.29/m^{3}s.u.b. standing) paid by WACAP;

e) lack of clarity over government attitudes to pulp mills;

f) the Federal Government not making its attitude clear on the export of wood fibre grown on farmland (or previously cleared land);

g) risk of
- market collapse
- fire
- biological attack;

h) not all farmland is particularly suitable for good pulpwood production.

6.2 Investors

The following points have been raised as major obstacles by stockbrokers and investment promoters who have studied the local Tree Trust concept:

a) the long pay-back period (say, 11 years);

b) the long period of contributions (say, 10 years);

c) the non-deductibility upfront of the total contributions;

d) the low rate of return considering the long pay-back period and the risk of market collapse, fire and biological attack);

e) the immobility of the investment. There is no apparent secondary market into which an original investor can sell.

7. *CURRENT TAX ACT*

Some features which impact on expenditure and revenue in respect of plantations developed by primary producers.

7.1 Eligible deductions for tax purposes

a) Most establishment costs are deductible.
Exceptions are - land clearing costs
land preparation
fund raising
Roads are deductible over their useful life or 25 years.

b) Tending and maintenance are deductible.

7.2 Prepaid expenses

a) That eligible portion expended on the plantation in the first 13 months following payment is deductible for the financial year in which the investment (of prepaid expenses) is made.

b) Regardless of the magnitude of the prepayment, after the first 13 months, only the eligible amount expended in any one financial year is deductible in respect of that year.

7.3 As primary producer, losses can be carried forward indefinitely (but inflation discounts this benefit over time).

7.4 Revenue is taxable

7.5 Costs are deductible where specifically directed at preventing or rehabilitating degradation of land.

See Appendix 3 - Discourse on Tax and Tree Trust Structure.

8. *RECOMMENDATIONS AIMED AT ACCELERATING APPROPRIATE PLANTATION METHODS OF REHABILITATING DEGRADED LAND*

8.1 With Federal Government approval, State land management authorities to declare and define areas which qualify for special status in terms of loans and tax in respect of land degradation.

These areas for the purpose of this submission will be called "declared areas". Examples are:

a) Kent, King, Kalgan catchments and land in between;

b) upper river catchments in the wheatbelt of Western Australia;

c) Peel Harvey Estuary and drainage systems;

d) particular sections of the Warren Catchment;

e) others as identified;

Specifically not declared would be areas where plantations could lead to consumption of fresh water and/or not lead directly to land rehabilitation or to prevention of land degradation.

Because of the need to generate scale and a commercial "critical mass" in one region, not all identified areas necessarily would be "declared" at the one time.

8.2 Federal Government to declare that there would be no embargo on exports of pulpwood grown on areas cleared prior to 1988. This would be notwithstanding the development of new pulpmills in Australia.

This point is very important: many potential growers of pulpwood are discouraged by the prospect of not being able to sell their produce into the world market (especially the Asian market). Their perception is that embargos are aimed at developing Australian pulpmills which will not be able to pay the internationally traded price of pulpwood chips.

8.3 With Federal Government approval, State land management authorities to define "appropriate plantation methods" and assess sites within "declared areas" for suitability for planting. Thus "approved sites" within "declared areas" would become eligible for Federal Government assistance so that "appropriate plantation methods" could be implemented thereon.

8.4 Farm owners paying a low tax (say, less than $20,000 tax paid per annum over the last five years) would be eligible for low interest loans from the Federal Government to plant and maintain "appropriate plantations" on "approved sites". Principal would be repayable from receipts of revenue from the tree crop. Receipts from the tree crops would be devoted entirely to the repayment of debt of principal and interest until such debt was expunged. The only security for the debt would be the trees established. Interest could be paid annually or on receipt of tree revenue. Interest payments would be deductible. The establishment and maintenance of the plantation would be required to be carried out by or to the specification of the State land management authorities who would administer the funds provided.

The State land management authorities would also oversee harvesting and marketing of the tree crop and oversee allocation of revenue. (This would be pursuant to State/Federal Government agreement on the mechanism for this, e.g. by approved agreements between grower and the State land management authority or a tree trust type of structure).

This involvement of the State land management authorities in the overseeing of plantations and administration of funds would also apply to 8.5 and 8.6 below.

The interest rate charged would not exceed the inflation rate.

These farmers can opt to invest their own funds as in 8.5 below and not borrow at low interest from the Federal Government.

8.5 Farm owners not paying a low tax (i.e. paying $20,000 per annum or above on average): it is proposed that money paid by the land owner for "appropriate plantation" work on "approved sites" in "declared areas" which is eligible for a deduction against income for tax purposes be deductible to the extent of 150%.

8.6 Investors investing in tree planting programmes which are "appropriate", on "approved sites", in "declared areas" either through CALM's sharefarming scheme or through a tree trust type structure (which is "approved"), have eligible contributions deductible to the value of 150% of the contribution.

8.7 For investment in "appropriate plantations" on "approved sites" in "declared areas", the Federal Government to provide 150% tax deductibility of all the upfront eligible payments in the year of investment, provided the investment is made through the State land management authorities or an approved tree trust structure and the funds not utilised in the first year retained in an "approved" interest-bearing tax-free trust fund, exclusively for use in the development of plantations on behalf of the investor.

8.8 The Federal Government provide funds to an approved authority (e.g. the Tree Trust) for a buy-out arrangement for investors who wish to quit their investment at net after-tax cost after three years. These buy-outs may be on-sold to new tree crop investors at market valuation (with the new investor achieving a tax deduction of 100%

of the purchase price). Market valuation is potentially much higher than net after-tax cost and proceeds from on-selling would be remitted to the Federal Government.

8.9 The Federal Government to approve the proposed Western Australian Tree Trust as a body authorised to receive investors' funds and apply them with the special benefits provided by the Federal Government (per 8.4 to 8.8) to "appropriate plantations" on "approved sites" in "declared areas".

See Appendix 4 - The Western Australian Tree Trust.

8.10 Where the State land management authorities have planted areas of trees at their cost and which meet the established criteria of "appropriate plantation methods" on "approved sites" in "declared areas" the Federal Government agrees that these areas may be on-sold or leased to investors whose costs of acquisition or lease are deductible to the extent of 150% for tax purposes. (In WA this area is currently approximately 2,000 ha of two-year old trees and 5,000 ha of one-year old trees.)

9. *PROPOSED CONDITIONS*

9.1 Proposals 8.1 to 8.10 to be in place for 11 years, but the Federal Government would retain the right to terminate for good reason any one or more of them at any time. (Ongoing commitments with respect to agreements made prior to termination would be honoured.)

9.2 Within the south-west of Western Australia (as defined) the maximum area planted with the benefit of the proposed measures (9.3 to 9.8) be not greater than 30,000 ha in any one year and not more than 300,000 ha in total.

9.3 Recipients of benefits would, under the State land management authority's "appropriate plantation methods", be required to fund adequate establishment and ongoing maintenance activities, and not to market and/or extract trees without the prior approval of the State land management authority under guidelines for extraction agreed with the Federal Government. If the funding of activities or extraction requirements were not met, an interest in the trees could accrue to the State land management authority or other "approved" body such as Tree Trust on behalf of the Federal Government.

9.4 The maximum area planted with the benefit of proposed measure 9.4 be limited to 5,000 ha per annum.

9.5 The minimum area planted with the benefit of proposed measures on any one property in any one year is 15 ha.

9.6 The State land management authorities provide services (agreed between the Federal Government and States) for monitoring land rehabilitation and an annual report to the Federal Government on progress on the effect on land degradation of the measures for which Federal Government assistance has been made available (i.e. proposals 8.1 to 8.10).

10. FUNDING, COSTS AND BENEFITS TO FEDERAL GOVERNMENT

This section introduces the commercial assumptions of eucalypt plantations to be grown in the south-west of Western Australia. The key factors are the market and demand for the wood fibre produced, the rate of growth, selling price, costs of growing, and supply to the market from global competitors.

All the factors have been researched carefully by CALM. In particular, CALM has established over sixty plots of *Eucalyptus globulus* within the age range 3-17 years and these have scientifically demonstrated outstanding growth capability on a wide range of sites.

In addition, one of CALM's partners in the Tree Trust, Westralian Forest Industries Limited, has funded a major feasibility study into commercial large scale planting of *Eucalyptus globulus* in Western Australia. Carried out by the international forestry consultant Groome-Poyry (a joint venture of John Groome & Associates of New Zealand and Jaako Poyry of Finland) the study concludes that the project is fundamentally sound, given funds for planting can be raised.

Although the dual objectives (or mission) of Tree Trust are given in the Introduction, it should be noted here that Tree Trust is required to effectively market the output of the plantations as well as to raise money from investors to fund them. Bunnings Limited is CALM's other partner in the Trust and it possesses 15 years experience in producing and marketing woodchips.

See Appendix 5 - Feasibility Study.

10.1 Low interest loans to low-tax paying or non-tax paying farmers per 8.4 above.

Assume that:

(i) the availability of low interest loans causes the establishment of plantations so that the maximum allowable 5,000 ha per annum is planted for 11 years;

(ii) all recipients of loans are, prior to planting, paying tax to the extent that eligible deductions for planting and interest payable to the Federal Government for the loan, lead to loss of tax revenue by the Federal Government;

(iii) all the land planted to trees is currently generating agricultural income;

(iv) tree planting will cause the loss of the assumed current agricultural income - thus the Federal Government will lose income for 10 years prior to the first crop of trees being harvested;

(v) because of the long term nature of the scheme, assume a 33-year study period.

10.1.1 *Funding by Federal Government*

The average annual funding requirement in the first 11 years is $6.41 million. After 11 years, repayments are occurring reducing the total funding to zero in year 21.

10.1.2 *Cost to Federal Government*

The average real interest cost of the funding in the first 11 years is estimated at $3.30 million.

The average total annual cost to the Federal Government over the 33-year study period is $7.73 million (this includes real interest on funding and foregone taxes from agriculture).

10.1.3 *Financial benefits to Federal Government*

The average annual taxation receipts over the 33-year study period from plantation forestry are $8.20 million, because a new wood fibre export industry has been created.

In looking at the Federal Government's cash flow situation, and excluding real interest but allowing for the effect of interest in reducing tax collections, it can be seen that the peak cumulative cash outflow for the Federal Government is $87.1 million in the 11th year, but by the 33rd year a positive cumulative inflow of $147 million has resulted, representing an IRR to the Federal Government of 7.3% real.

10.2 150%deductibility of eligible plantation costs to tax paying farmer landowners per 8.5 above.

Assume that:

(i) the availability of 150% deductibility causes the establishment of plantations so that the maximum allowable 5,000ha per annum is planted for 11 years;

(ii) because eligible farmers are paying tax, the establishment costs of the plantations cause loss of tax revenue to the Federal Government;

(iii) all land planted to trees is currently generating agricultural income;

(iv) tree planting will cause the loss of the assumed current agricultural income - thus the Federal Government will lose income for 10 years prior to the first crop of trees being harvested;

(v) because of the long term nature of the scheme, assume a 33 year study period.

10.2.1 *Funding by the Federal Government*

There is zero direct funding required.

10.2.2 *Cost to Federal Government*

As there is no direct funding, there is no interest cost.

The average total annual cost to the Federal Government over the 33 year study period is $5.08 million (this is foregone taxes from agricultural income and from deductible plantation costs).

10.2.3 *Financial benefit to Federal Government*

As in 10.1.3, the average annual taxation receipt over the 33 year study period from plantation forestry is $8.20 million.

In looking at the Federal Government's cash flow situation without interest effects, the peak cumulative cash outflow is $52.1 million in year 11, but by year 33 a positive cumulative inflow of $103.0 million has resulted, representing an IRR to the Federal Government of 7.2%.

10.3 150% deductibility of eligible plantation costs to investors p e r recommendation 8.6.

Assume -

(i) the availability of this measure causes investors to fund the planting of 10,000 ha per annum of farmland for 11 years;

(ii) no loss of farm revenue occurs because land rent received by farmers equals the income previously received from the land planted;

(iii) investor tax rate is 49%;

(iv) a 33-year study period.

10.3.1 *Funding by the Federal Government*

There is zero direct funding required.

10.3.2 *Cost to Federal Government*

The average total annual cost is $13.24 million (representing foregone tax receipts from investors).

10.3.3 *Financial benefit to Federal Government*

The average annual tax receipt over the 33-year study period from plantation forestry is $20.1 million.

In looking at the Federal Government's cash flow situation without interest effects, the peak cumulative cash outflow is $134 million in year 11, but by year 33 a positive cumulative inflow of $227 million has resulted representing an IRR, real, to the Federal Government of 6.5%.

10.4 Restoration of deductibility of eligible prepayments in year paid per recommendation 8.7 (with 150% deductibility for upfront prepayments and 100% deductibility for downstream prepayments).

Assume:

(i) the availability of this measure causes investors to fund the planting of 10,000 ha per annum of farmland for 11 years;

(ii) no loss of farm revenue occurs because land rent received by farmers equals the income previously received from the land planted;

(iii) investor tax rate is 49%

(iv) a 33-year study period.

10.4.1 *Funding by the Federal Government*

There is zero direct funding required.

10.4.2 *Cost to Federal Government*

The average total annual cost is $7.56 million over the study period (representing foregone tax receipts from investors).

10.4.3 *Financial benefit to the Government*

The average annual receipts over the study period is $16.45 million for plantation forestry tax receipts.

In looking at the Federal Government cash flow situation without interest effects, the peak cumulative cash outflow is $256 million in year 11, but by year 33 a positive cumulative inflow of $287 million has resulted, representing an IRR (real) to the Federal Government of 4.3%.

10.5 The investor buy-out provisions of recommendation 8.8.

Since the buy-outs are going to be on-sold at market value with a 100% tax deduction, the cost to the Federal Government is likely to be zero.

10.6 Investor purchase or lease of State eucalypt plantings with 150% deductibility per recommendation 8.10.

This would have a similar effect as given in 10.4 above, but pro-rata, depending on the area planted by State governments. Given that the recommended measures in Section 8 spark private sector funded plantings, then State governments are unlikely to be funding plantings of their own.

See Appendix 6 - Computer Printouts of Funding, Costs and Benefits to Federal Government.

11. *CONCLUSIONS*

To date, the private establishment of hardwood plantations on farmland has not been significant.

A regulated dispersed plantation regime can greatly rehabilitate degraded land and prevent degradation.

A regulated dispersed plantation regime established on farm and other land previously cleared can, in the long term, produce income greater in real terms than average present-day farm incomes.

Present day farm incomes are under some threat from continuing decline in land quality.

The recommendations contained in Section 8 of this submission, if adopted by the Federal Government, will spark and maintain a quantum leap forward in privately funded reforestation of land where it is most needed.

These new plantings will not only bring with them increases in land quality, but a positive financial return to the Federal Government through increased tax receipts.

The new plantings will be, in effect, another crop for the land owner. The tree crop will produce export income and in short time lead to higher employment rates on the land than exist today. New industries will spring up in decentralised regions.

There will be other benefits for the environment, such as a reduction in atmospheric carbon dioxide (a contribution to the reduction of the "greenhouse effect"). The eucalypt plantations will offer improved habitat to native fauna.

While occupying about 20% of the total existing farmland, the new "crop" (trees) will be reducing soil and water salinity, reducing surface runoff, providing windbreaks and protection for farm animals, and reducing soil erosion; in short, substantially lifting the productivity of the land left in traditional agriculture.

In some areas/catchments, significant improvements to public water supplies will result.