

DISTRICT FOREST MANAGEMENT PLAN REPORT MURCHISON DISTRICT 2005/2006

1 Sustainable Production

- Supply, as part of a sustainable yield unit of production forest, a range of wood products to forest industry and the community

1.1 Market trends

General softening of the market across all products throughout the year, however demand started to increase towards the end of the financial year. The District actively participated in the Three-Year Plan Consultation process, holding briefings with all Councils. Where possible, briefings were held in conjunction with other stakeholders (eg. Gunns). Briefings were also held with apiarists in the District.

1.2 Value-adding and New Industries

Planning for Smithton rotary veneer mill continued. Joint venture partner was announced, with construction estimated to begin in 2007. Island Specialty Timbers (IST) expanded role from the south with a yard now operating at Smithton. Regular tenders occurred throughout the year which have now given non contract customers the opportunity to source special species timbers.

1.3 Annual wood production

The commercial wood production figures for the District for the review period are shown in the table below:

Forest type	Product	2003-2004	2004-2005	2005-2006
Native forest	Sawlog Cat. 1 & 3 (m ³)	64,507	52,991	60,512
	Sawlog Cat. 2 & 8 (m ³)	24,622	10,145	11,167
	Veneer (m ³)	189	2,101	1,973
	Regrowth peeler (tonnes)	67,430	68,065	57,784
	Special species (m ³)	16,752	10,510	10,799
	Pulpwood (tonnes)	580,699	402,370	322,722
	Fuel & firewood (m ³)	2,383	4,396	3,569
	Posts & poles (units)	1,366	2,228	754
	Craftwood (units)	68	841	834
	Minor Products	0	0	4,137
Native Forest Total		758,016	553,647	474,251
Plantation	Softwood sawlog (m ³)	6,783	58	0
	Softwood export log (m ³)	0	487	0
	Softwood roundwood (m ³)	0	0	0
	Young Eucalypt Sawlog (m ³)	0	0	273
	Softwood pulpwood (tonnes)	14,566	263	0
	Eucalypt pulpwood (tonnes)	18,434	0	11,804
Plantation Total		39,783	808	12,077

NB. The quantities reported for softwood plantation production exclude production from Taswood Growers. This is the softwood joint venture company owned by Forestry Tasmania and GMO Renewable Resources.

1.4 Pulpwood Assessment

TOTAL	2003-2004	2004-2005	2005-2006
Pulpwood sold (tonnes)	580,699	402,370	322,722
Pulpwood audited (tonnes)	18,982	23,959	14,359
Sawlog recovered (tonnes)	13	25	22

Results of pulpwood assessments reflect low levels of sawlog leakage. Audits are conducted at the landings and at the mills.

1.5 Logging Residue Assessments

Year	Number coupes	Mean residues (m ³ /ha)	Median residues (m ³ /ha)
2001/2002	13	1.59	1.28
2002/2003	0	0.00	0.00
2003/2004	1	2.37	2.37
2004/2005	7	2.79	3.25
2005/2006	13	3.56	2.58

Contractor for coupe SU035C will be returning to relog in summer 2006-2007 when drier conditions prevail.

1.6 Special Species

- Maintain or increase the sustainable supply of special species

All craft products have increased compared to last year due to the introduction of the IST yard at Smithton. Recovery and sale of Huon Pine craftwood from Teepookanna Plateau also occurred.

Species	Use	Volume (T)
Eucalypt	Craft	711
Eucalypt	Burl	62
Eucalypt	Beams	579
Myrtle	Burls	11
Huon Pine	Craft	51

Non-sawlog special species only in this table. All sawlog special species volume reflected in table 1.2.

1.7 Other Forest Products

- Provide opportunities for other products to be utilised including nectar, essential oils, treeferns, other plant materials, firewood, tourism/recreation initiatives and aesthetic values of the forest.

1.7.1 Apiculture

Number of Apiary Sites Available	190
Number of Apiary Sites Utilised	181
Number of Hives	9,506
Volume of Honey	29,5216 kg

Leatherwood flowering was affected by a wet spring then cold periods during January. Most yields below expectations.

1.7.2 Tree Ferns

	2004-2005	2005-2006
Number of FPP's which included tree fern harvesting	15	11
Volume Sold (crowns)	168	248

1.7.3 Firewood

Volume (tonnes)	2004-2005	2005-2006
Domestic Sales	536	1,399
Commercial Sales	4,396	4,364
TOTAL	4,932	5,703

1.7.4 Seed collection

Species	Volume (kg)			
	2002-2003	2003-2004	2004-2005	2005-2006
<i>E. obliqua</i>	662.3	810.5	232.7	345.4
<i>E. delegatensis</i>	2.2	0.0	0.5	0.6
<i>E. regnans</i>	0.0	0.0	5.3	0.0
<i>E. nitida</i>	13.4	24.6	3.3	86.3
<i>E. brookeriana</i>	0.9	0.0	2.5	1.1
<i>E. amygdalina</i>	0.0	2.8	9.6	14.7
<i>E. viminalis</i>	0.0	0.3	0.0	0.0
TOTAL	678.8	838.2	344.9	448.1

1.7.5 Other Products

Species	Volume	Units
Tea Tree Stakes	200	Number
Chopping Blocks	253	Lin mtrs
Posts NF (round)	330	Lin mtrs

2 Silviculture

2.1 Harvesting and Site Preparation

Native Forest Harvesting and Site Preparation

Treatment	Clearfell (ha)	Partial Logging (ha)	Thinning (ha)	
			PCT ₁	CT ₁
Harvesting	1,160	20	0	14
Area of old growth harvested	189	6		
Area of rainforest harvested	137	3		
Mechanical disturbance (non burning) ²	0	0		
Harvesting disturbance only ²	0	0		
High Intensity Burning (Cable Harvesting) ²	0	0		
High Intensity Burning (Ground-based Harvesting) ²	280	0		
Excavator heap +/- burn ²	0	0		
Top disposal/Low intensity burn ²	0	0		

1. Pre-Commercial Thinning [PCT] and Commercial Thinning [CT]

2. Native forest site preparation component only.

Plantation Harvesting and Site Preparation

Treatment	Clearfell (ha)	Thinning (ha)	
		NC ₁	C ₁
Softwood Harvesting	0	0	0
Hardwood Harvesting	0	30	154
Softwood Site Preparation treatment	0		
Hardwood Site Preparation treatment	1,158		
Effectively established Hardwood Plantation from survival surveys (1R or 2R)	829		
Effectively established Softwood Plantation from survival surveys (1R or 2R)	NA		
Remediation works for understocked Hardwood Plantation areas	186		
Remediation works for understocked Softwood Plantation areas	NA		

1. Commercial [C] and Non-commercial [NC]

N/A = Information Not Available

2.2 Re-establishment treatments

2.2.1 Native Forest

Native Forest Treatment Areas (ha)

	Partial Logging ¹	Clearfell	Clearfell followed by:			Non-forest, fallow ²
			Regeneration by seeding	Plantation		
				Eucalypt	Pine	
Native Forest	20	1,160	280	136	0	744
Old Growth	6	189	159	30	0	
Rainforest	3	137	136	1	0	

1. Thinning, retention of advanced growth, seed trees, shelterwood, and group or single tree selection.

2. Clearing primarily for infrastructure or fallow (to be planted or carryover).

Regeneration Success (ha)

Forest Type	0-9% (not stocked)	10-39% (ecological stocking)	40-64% (low wood quality)	65-84% (optimum)	85-100% (maximum)	Total
<i>Dry eucalypt</i> ¹	0	0	0	0	0	0
<i>Wet eucalypt</i> ¹	0	0	0	459	172	631
<i>High altitude E. delegatensis</i> ¹	0	0	0	0	0	0
<i>Fenced intensive blackwood</i> ¹	0	0	0	264	54	318
<i>Swamp blackwood</i> ²	0	0	0	0	0	0
<i>Rainforest</i> ²	0	0	0	63	0	63
<i>Huon pine forest</i> ¹	0	0	0	0	0	0
Total	0	0	0	786	226	1,012
Unacceptable Standard	% Area Met Standard					100%

1. 2002/2003 Sowing Season.

2. 2000/2001 Sowing Season.

2.2.2 Plantation Development

- Continue to develop a financially viable plantation estate, both hardwood and softwood, in conjunction with the forest industry and other interested parties

Plantation R1 and R2 establishment areas (ha)¹

	Existing Plantation clearfelled followed by plantation (R2)		New plantations on cleared land (R1) ⁸		Total ³
	SW ²	HW ²	SW ²	HW ²	
Forestry Tasmania (FT) Plantation on State Forest & Crown Land	0	0	0	17	17
FT Joint Venture Plantation on State Forest & Crown Land ⁴	128	0	0	0	128
FT Joint Venture on Private Land	0	0	0	0	0
Tassie Trees Trust Plantation on State Forest ⁵	0	0	0	0	0
FT Plantation on Private Land ⁶	0	0	0	0	0
Private Plantation on State Forest	0	0	0	507	507
2005/2006 TOTAL⁷	128	0	0	523	651

1. Planting period for mapping and reporting purposes is from 1st July 2004 to 30th June 2005.

2. Softwood [SW] and Hardwood [HW].

3. Figures in the Total column exclude fallow, and are rounded actual totals.

4. Includes the softwood plantations, which are 50% owned by GMO Renewable Resources, for which data is supplied by Rayonier Australia as at 30/06/06.

5. Tassie Trees Trust plantations are mainly jointly-owned with private growers, but include small proportions owned solely by FT.

6. Includes recent commercial acquisitions.

7. Figures in the Total row are not the sum of the columns, but the rounded actual totals.

8. Cleared land includes agricultural land (generally softwood plantations) and cleared/converted native forest (generally hardwood plantations).

Plantation silviculture

	Primary Fertilising (ha)		Secondary Fertilising (ha)		Non-Commercial Thinning (ha)		Commercial Thinning (ha)		Pruning (ha)	
	SW ₁	HW ₁	SW ₁	HW ₁	SW ₁	HW ₁	SW ₁	HW ₁	SW ₁	HW ₁
Forestry Tasmania (FT) Plantation on State Forest & Crown Land	173	278	0	610	0	30	0	154	0	2,161
FT Joint Venture Plantation on State Forest & Crown Land	0	0	0	0	0	0	0	0	0	0
FT Joint Venture on Private Land	0	0	0	0	0	0	0	0	0	0
Tassie Trees Trust Plantation on State Forest	0	0	0	77	0	0	0	0	11	380
FT Plantation on Private Land	0	0	0	0	0	0	0	0	0	11
Private Plantation on State Forest	0	911	0	1,161	0	0	0	0	0	487
TOTAL	173	1,189	0	1,848	0	30	0	154	11	3,039

1. Softwood [SW] and Hardwood [HW]

Plantation Ownership Area (ha)

Ownership	Net Area of Plantation at 30/06/06 ³	
	SW	HW
Forestry Tasmania (FT) Plantation on State Forest & Crown Land	1,780	5,481
FT Joint Venture Plantation on State Forest & Crown Land ¹	3,847	55
FT Joint Venture on Private Land	0	78
Tassie Trees Trust Plantation on State Forest ²	10	608
FT Plantation on Private Land ⁵	0	376
Private Plantation on State Forest	0	3,544
2005/2006 TOTAL⁴	5,637	10,143

1. Includes the softwood plantations that are 50% owned by GMO Renewable Resources, for which, data is supplied by Rayonier Australia, as at 30/06/05.

2. Tassie Trees Trust plantations are mainly jointly-owned with private growers, but include small proportions owned solely by FT.

3. Totals exclude plantation areas clearfelled but not yet replanted.

4. Figures in the Total rows are not the sum of these columns but the rounded actual totals.

5. Includes recent commercial acquisitions.

Species Planted (ha)

Species ^{1,2}	Area Planted 2005-2006	Total Area Planted at 30/06/06 ³
<i>Eucalyptus globulus</i>	0	2,826
<i>Eucalyptus nitens</i>	523	6,394
Other Hardwoods	0	929
<i>Pinus radiata</i>	128	5,610
Other Softwoods	0	27

1. Other hardwoods and other softwoods may contain mixed plantings of *E. globulus/nitens* and/or *P. radiata* with or without other species.

2. The majority of mixed hardwood/softwood plantations are reported as hardwood.

3. Totals exclude plantation areas harvested but not yet re-planted.

2.3 Seed Sown

Species	2004-2005 (kg)	2005-2006 (kg)
<i>E. obliqua</i>	597.5	101.7
<i>E. delegatensis</i>	11.8	0.0
<i>E. nitida</i>	24.6	4.8
<i>E. brookeriana</i>	1.9	0.0
<i>E. amygdalina</i>	0.6	0.0
TOTAL	635.4	105.5

2.4 High Intensity Burning

2.4.1 Regeneration Burning

Year	No. planned	Total area to be burnt (ha)	No. attempted	Total area which achieved standard (ha)
2003/2004	35	1,297	30	637
2004/2005	28	795	28	661
2005/2006	12	320	12	277

2.4.2 Plantation Establishment Burning

Year	No. planned	Total area to be burnt (ha)	No. attempted	Total area which achieved standard (ha)
2003/2004	35	1,136	28	897
2004/2005	26	1,219	26	1,210
2005/2006	19	801	19	788

2.5 Seeding

Year	No. coupes sown	Avg On-Site Seed (%)	Avg In-Zone Seed (%)	Avg Out of Zone Seed (%)	No. met On-Site standard	No. met Pi-type standard
2003/2004	29	30	51	19	11	29
2004/2005	35	25	53	22	15	20
2005/2006	12	18	65	17	2	9

2.6 Silvicultural Season

About 300ha was carried over as the HIB season ended with insufficient drying time between rain periods. No Variable Retention coupes were burnt. The district collected 21,300 t of capsules for the year. Indications are that seed crops are continuing to improve and on-site and in-zone quality standards should continue to improve.

3 Operational Achievements

3.1 Roading

Road work type	2005/2006
New road construction (km)	33
Major road upgrades or realignments (km)	0
Major new structures (#)	22
Road maintained/repaired (km)	494

3.2 The Forest Estate

Land Classification	Area (ha) ¹	% ³
Formal Reserves	53,500	3.5%
Informal Reserves	144,400	9.5%
Native Forest Wood Production Coupes	127,900	8.4%
Native Forest Outside Wood Production Coupes	120,600	7.9%
Hardwood Plantation ²	9,700	0.6%
Softwood Plantation ²	5,700	0.4%
State forest Total	461,800	30.4%
Non-production Total	325,800	21.4%

1. Area as at 30th June, 2006. Includes Buckland Military Training Area.

2. Excludes Forestry Tasmania managed plantations on private land as well as plantations in Reserves.

3. Percentage of total State forest (Statewide).

3.3 Browsing control

Browsing assessments

	Native forest	Plantation
Area monitored (ha)	1,147	1,220
Area deemed to require treatment (ha)	737	1,232

3.3.1 1080 usage

1080 usage on Forestry Tasmania's Defined Forest Area²

	1080 used (kg)	Area established (ha)	Area treated (ha)
Hardwood Plantation ¹	0.0150	17	47
Softwood Plantation ¹	0.0000	0	0
Native Forest	0.0225	300	128
TOTAL	0.0375	317	175

1. Including second rotation planting.

2. On land managed by FT (excluding JV's).

3.4 Non-chemical browsing control

Treatment Type	2003-2004	2004-2005	2005-2006
Number of shooting operations (no. of coupes)	28	52	37
Length of fencing (km)	20	23	0
Seedlings treated with repellent (ha)	10	0	0
Stockings/Sleeves (ha)	2	0	0
Tree guards (number of coupes)	0	0	1

No coupes were fenced this year due to coupes not being burnt. Alternative browsing control methods have proven effective to date. The predominant method used has been shooting, and trapping has commenced in the district with some success. Shooting on some coupes has been actually cheaper than 1080, but overall the browsing control unit cost across the whole program is more expensive than 1080.

3.5 Pesticide Usage^{5,6}

Use	Category	Kilograms ³			Area treated (ha)		
		2003-2004	2004-2005	2005-2006	2003-2004	2004-2005	2005-2006
Herbicide	Unscheduled ⁴	10	0	0	0	0	0
	Sched 5 Chemical ¹	627	854	750	1,074	3,262	2,593
	Sched 6 Chemical ²	5	11	23	118	193	182
	TOTAL	642	865	773	1,192	3,454	2,775
Insecticide/Fungicide	Unscheduled ⁴	0	4	0	0	320	0
	Sched 5 Chemical ¹	0	0	0	0	0	0
	Sched 6 Chemical ²	0	2	10	0	84	421
	TOTAL	0	6	10	0	404	421
Adjuvant	Unscheduled ⁴	N/A	43	24	N/A	1,331	175
	Sched 5 Chemical ¹	N/A	17	1	N/A	117	82
	TOTAL	N/A	60	25	N/A	1,448	257

1. Poisons of a hazardous nature that are readily available to the public but require caution in handling storage and use.

2. Poisons that are available to the public but are of a more hazardous or poisonous nature than those classified in schedule 5.

3. Kilograms of active ingredient

4. Poisons that have not yet received a poison schedule rating.

5. Excludes Perth Nursery

6. Includes usage by FT on Joint Ventures and leases, but not usage by third parties (eg Rayonier) on State forest.

3.6 Weeds, Pests and Diseases

- Institute effective weed, pest and disease control

Damage agent	Area treated (ha)	Vegetation affected	Control method
Vertebrate Pests			
Possums, Wallabies	175	Native forest, Plantations	Poisoning
Possums, Wallabies	1,969	Native forest, Plantations	Shooting, Trapping
Invertebrate Pests			
Chrysomelid Leaf Beetles/ Gonipteros Weevil	131	Hardwood plantations	IPM and spray with alpha-cypermethrin or spinosad
Weeds			
Ragwort	2	Native Forest, Plantations	Spray
Pampass	1	Native Forest, Plantations	Spray
Spanish Heath	1	Native Forest, Plantations	Spray
Gorse	65	Native Forest, Plantations	Spray
Broom	23	Native Forest, Plantations	Spray
Other	1,357	Plantations, Native Forests	Spray

General Forest Health Issues

Forest health issue	Number	Area
Machinery hygiene breaches	0	
New <i>Phytophthora cinnamomi</i> susceptible areas identified (ha)		2

No major health issues identified. A potential copper deficiency is evident in the Crayfish area, which is being monitored closely.

3.7 Fire Management

- Protect high value assets from fire through application of the District fire management plan and through appropriate wildfire suppression

3.7.1 Fuel Reduction Burning

Fuel reduction burning on State forest

Performance indicator	Number of burn plans prepared	Number of burns conducted and achieved standard	Total area for which burn plans prepared (ha)	Total area burnt and standard achieved (ha)
Fuel reduction burns – partially harvested coupes ¹	0	0	0	0
Broad area fuel reduction burns ²	18	13	5,900	3,100
TOTAL	18	13	5,900	3,100

1. These partially harvested areas do not require fire for regeneration purposes, but do require burning to reduce the fire hazard. These coupes can be excavator heaped, extending the time-frame in which they can be burnt.

2. Broad-area fuel reduction burns that are strategically planned to protect nearby assets, or for ecological purposes (e.g. coastal heath or buttongrass).

3.7.2 Wildfires

The following table shows the area of **unplanned** fire including the area with severe damage on State forest:

	Area burnt 2004-2005 (ha)	Number of fires 2005-2006	Area burnt 2005-2006 (ha)	Ten year average to 2005-2006 (ha)
Total unplanned fire	13	10	221	1,350
Severe fire damage	1		201	855
Rehabilitation of severely burnt native forest	320		0	

Note: 10-year average data does include current year in the ten years.

Number of wildfires by month

Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
0	0	0	0	1	0	3	4	2	0	0	0	10

4 RFA Implementation

- Implement the outcomes of the RFA as they apply to the Plan Area, including those relating to the maintenance of a permanent native forest estate, maintenance of biodiversity and protection of regional conservation values.
- Maintain State forest contribution to the CAR system in accordance with RFA requirements.

Priority communities that are known or identified through pre-harvest coupe inspections have been excluded from coupes. No known clearing of internal patches of priority communities has occurred. Areas are mapped and registered on the Management Decision Classification (MDC) system where appropriate.

5 Financial Performance

- Provide a contribution from the commercial management of the Plan Area

Forestry Tasmania operates as a commercial organisation and pays an annual dividend to its shareholder, the Tasmanian Government, based on operating performance after tax that is calculated by an agreed formula with the Department of Treasury and Finance. Total annual payments to the consolidated fund are comprised of dividends, taxation equivalents and guarantee fees.

All returns to the consolidated fund are based on the organisation as a whole and not individually calculated based on individual operating districts. Refer to the Forestry Tasmania 2004-2005 Annual Report for full details on financial performance.

6 Conformance with Sustainable Forest Management Policy

- Conform to Forestry Tasmania's environmental policy, including the fulfilment of all statutory environmental standards and achievement of sustainable forest management targets

6.1 Forest Practices Authority Audit

Forest practices authority audit results

Forest Practices Code Criteria	2003-2004 Performance (Rating 1-4)	2004-2005 Performance (Rating 1-4)	2005-2006 Performance (Rating 1-4)
Roading	3.7	3.1	3.6
Harvesting	4.0	3.1	3.8
Planning	3.9	3.3	3.5
Reforestation	3.9	3.1	3.8
Flora	3.8	3.5	3.3
Fauna	4.0	3.0	3.5
Geomorphology	4.0	3.2	3.9
Cultural Heritage	3.9	3.4	3.8
Landscape	4.0	3.3	4.0
Fuel and Rubbish	3.9	3.4	4.0
Soil and Water	4.0	3.2	3.9
AVERAGE	3.9	3.3	3.8

1 = Unacceptable; 2 = Less than Sound; 3 = Sound (FPA benchmark score); 3.5 = Above Sound; 4 = High

6.2 Forest Practices Breaches (non-S41)

List of Forest Practices Breaches that resulted in reports being made to the Forest Practices Authority, but no S41 notice was issued.

Coupe	Non-conformance
BV001A	Contractor drove machine through a wildlife habitat clump/landscape screen.

6.3 Notices

6.3.1 S41 Notices

S41 No.	FPP No.	Coupe	Non-conformance	Corrective action
0631	DCG0221	CF056A	Newhaven Spur 2/1 Road formation and table drains have been destroyed by logging and establishment contractors. Muddy water is running down road causing erosion.	Reform road, improve drainage.
2886	DCG0229	TP037D	Landing and snig tracks uncorded.	Cord landings and snig tracks
2887	DCG0240	TG016E	Breach of FPP and breach of Forest Practices Code (wet weather limitations) working on uncorded snig tracks.	Stopped snigging on track until it is corded.
2888	IAB0016	KA005D	Puddling of soils on main snig tracks. Poorly constructed stream crossing with water running over cording.	Main track not to be used until corded to avoid further puddling of soils. Water crossing to be reconstructed to allow flow of water through the construction, not over cording material.

6.3.2 S38 and S39 Notices

No S38 or S39 notices were issued to Murchison District by Workplace Standards in 2005-2006.

6.4 Fines or prosecutions

No fines or prosecutions issued to Murchison District in 2005-2006.

6.5 Compliance with other legislation

Murchison District complied with all other legislation.

7 Non-timber Forest Values

7.1.1 Biodiversity

- Maintain biodiversity values

Special value	Area managed (ha)
Biodiversity Spines	58,964
Fauna	8,294
Flora	149,571
Wildlife Habitat Strips	8,294

7.1.2 Threatened Flora

- Protect rare or threatened plant species, and plant communities or associations that are of botanical significance and maintain the extent and diversity of flora habitat sufficient to allow the maintenance of viable populations of plant species

No known threatened species (or sites as such) were identified during 2005-2006. Forest Practices process identifies areas likely to contain threatened flora or flora communities. The District continued to exclude and protect areas containing *E. brookeriana* forest community throughout the year (<50ha). Work was undertaken at Barcoos road on a site containing *Hypolepis distans*.

Threatened species management	Number	Species
New Sites Identified	<50ha	<i>E. brookeriana</i> communities

7.1.3 Threatened Fauna

- Protect rare or threatened forest dependent fauna species and maintain an area and diversity of fauna habitat sufficient to allow the maintenance of the long term viability and range of fauna species

Threatened species management	Number	Species
Habitat Surveys Conducted	10-20	Grey Goshawk (FPA)
Animal/Nest Surveys Conducted	96	Wedge Tailed Eagles
New threatened species records identified on State forest	4	Wedge Tailed Eagles
	2	Grey Goshawk
Draft agreements in place	1	<i>Tasmaphena lamprides</i>

7.1.4 Landscape Values

- Conserve landscape values

New area managed for Landscape/Visual Amenity 2005-2006 (ha)	<100ha
Total area managed for Landscape/Visual Amenity (ha)	52,710

Coupes are assessed for visual landscape values and coupes boundaries are adjusted where required. Significant time was spent on Black River picnic area to inform the public on a range of issues including landscape. Plans for this coupe were eventually abandoned.

7.1.5 Management of non-Aboriginal Cultural Heritage Sites

- Conserve places, sites and features of non-Aboriginal cultural significance

Non-Aboriginal surveys

Year	Area Surveyed (ha)	Number of new sites detected	Number of old sites redetected
2003-2004	43	0	0
2004-2005	105	2	0
2005-2006	10	5	0

Non-Aboriginal cultural heritage management

Non-Aboriginal cultural heritage management	Number	Site types
Number of sites assessed ¹	5	Tramlines
• Number of sites in good condition	5	
• Number of sites in average condition	0	
• Number of sites in poor condition	0	

1. Assessed = assessed by or within consultation with FPA expert on site.

Tramway sites found or thought to exist were excluded from disturbance as much as possible through consultation with FPA through Special Values process.

7.1.6 Management of Aboriginal Cultural Heritage Sites

- Encourage cooperative management programs with Aboriginal people in areas of significance to them in a manner consistent with other management practices

Aboriginal surveys

Year	Area Surveyed (ha)	Number of new sites detected	Number of old sites redetected
2003-2004	43	0	0
2004-2005	1,354	3	0
2006-2006	1,750	2	0

Aboriginal cultural heritage management

Aboriginal cultural heritage management	Number	Site types
Number of sites assessed ¹	2	Artefact scatters
• Number of sites in good condition	2	
• Number of sites in average condition	0	
• Number of sites in poor condition	0	
Number of sites where Indigenous people are involved in management decision making	1	Rebecca Forest
Number of staff trained in the procedures for the protection of Aboriginal sites	1	

1. Assessed = assessed by or within consultation with FPA expert on site.

7.1.7 Soil Conservation

- Conserve and identify soil values

Area assessed for soil erodibility (ha)	3,555
Low	965
Moderate	425
Mod-High	2,082
High	84
Very High	0
Unavailable for harvest due to erosion hazard (ha)	50-100ha
Number of landslips detected in the district in 05/06	0
Total area within district managed for soil values (ha)	16,722

While a relatively small area, a number of coupes had streams and reserves upgraded as a result of interpreting guidelines for class 4 streams. Any areas identified for protection/rehabilitation because of soil conservation factors i.e. erosion, landslip, were placed into MDC with Landslide Hazard (HzL) or Erosion Hazard (HzE) SMZ's.

7.1.8 Geodiversity and Geomorphological Significance

- Maintain geodiversity and protect features and systems of geomorphological significance

Number of geomorphological sites identified	<100
Number of geomorphological sites protected from damage	<100
Area managed for geoconservation values (ha)	16,722

All sites identified as geomorphological features were within production areas (planned coupes). All of the sites were protected (sinkholes) using standard sinkhole provisions in FPP's through consultation with FPA. Significant sinkhole areas were discovered in Meryanna and Salmon River Forest Blocks.

7.1.9 Water Quality and Supply

- Maintain water values and allow for the continued supply of water for domestic and rural purposes

Water Quality Monitoring Results

Contaminant sampled for	No. samples	No. samples returning positive results	No. returning results outside standard	Acceptable standard
Chemical Contaminants₁				
Clopyralid (Lontrel)	22	1	0	1000 µg/litre
Dominex (Cypermethrin)	41	0	0	Not listed
Glyphosate (Round Up)	0	0	0	1000 µg/litre
Haloxypop (Verdict)	16	0	0	Not listed
Metsulfuron-methyl (Brush Off, Brushkiller)	46	0	0	30 µg/litre
Phosphorous	0	0	0	100 µg/litre
Total Nitrogen	45	31	11	800 µg/litre
Terbacil (Eucmix)	0	0	0	30 µg/litre
Sulfometuron-methyl (Mako, Oust, Eucmix)	46	0	0	Not listed
Spinosad (Success)	0	0	0	Not listed
Non-chemical Contaminants₂				
Temperature	0	0	0	No value set
Turbidity	0	0	0	5 NTU
pH	0	0	0	6.5-8.5
Dissolved Oxygen	0	0	0	>85%
Electrical Conductivity (EC)	0	0	0	Not listed
TOTAL	216	32	11	
Spray Operations				
No. spray operations	44			
No. spray operations where water samples were taken	44	32	11	

1. Standard is ADWG Health Value where standard exists. Where no standard exists, any detection is recorded.

2. Generally accepted standards (e.g. Waterwatch standard).

5 coupes returned results outside the standard for Total Nitrogen.

Chemical detections

District	Coupe	Date	Chemical	Result (ug/l)	ADWG Health Value
MU	IR039E	29/09/05	Clopyralid	0.3	1000 µg/litre

Fuel or chemical spills

Number of fuel or chemical spills	1
Volume of fuel or chemical spills (Litres)	20
Number of fuel or chemical spills that entered a watercourse	0

One oil spill was recorded for Murchison in 2005/2006. It came from machinery that was being repaired. Emergency spill control procedures were put into place immediately, and contaminated material was taken to a recognised disposal site.

Harvesting operations were planned for two water supply catchments in 2005/2006. Harvesting of 1.1% of the State Forest Area in the Cam River and 0.2% of State Forest within the Pieman River Catchments was planned.

7.1.10 Tourism, Recreation and Education

- Provide infrastructure for and foster tourism, recreation and visitor education consistent with multiple use values

Organised recreational events on State forest

Date	Event
July 2005	Tas Enduro Club event at Oldina
November 2005	North West Regional Scout Group at Upper Natone Reserve
October 2005	Hellyer Sprint Rally/Introductory Rally
October 2005	Tas Enduro Club event at Oldina
December 2005	Phenomena Youth, Christian City Church at Oldina
March, April 2006	Adult Education 3 courses held on State Forest
April 2006	Tas Enduro Club event at Cuprona Road
May 2006	Hellyer Rally
May 2006	City of Burnie Cycling Club MTB event at Dial Range

Recreational activities and facilities on State forest

Activity	Site	Dip River	Black River	Kanunnah Bridge	Sumac Lookout	Julius River	Lake Chisholm	Milkshakes Hills	Tayatea Bridge	Montezumma Falls	Balfour Track	Oldina	Dial Range	Dismal Swamp
Self Guided Interpretation		Y				Y	Y	Y		Y				Y
Guided Interpretation							Y							Y
Short Walk		Y	Y			Y	Y	Y		Y	Y	Y	Y	Y
Day Walk											Y		Y	
Overnight Walk														
Education							Y			Y	Y		Y	Y
Cultural Heritage		Y								Y	Y		Y	Y
Mountain Bike Riding										Y	Y		Y	
Trail Bike Riding													Y	
Horse Riding											Y		Y	
Boating														
Canoeing				Y					Y					
Fishing		Y	Y	Y					Y			Y	Y	
Lookout		Y			Y			Y		Y				Y
Special Events										Y		Y	Y	Y
Facilities														
Disabled Access		Y	Y		Y	Y		Y	Y	Y	Y	Y	Y	Y
Info/Visitor Centre		Y			Y			Y				Y		Y
Toilets		Y				Y		Y		Y		Y		Y
Gas BBQ														Y
Wood BBQ			Y	Y		Y		Y	Y			Y		
Picnic Shelter		Y	Y	Y		Y		Y						Y
Picnic Area				Y	Y	Y		Y	Y	Y		Y	Y	Y
Fireplace		Y				Y						Y		
Camp Sites						Y								
Caravan Sites														
Boat Ramp														
Walking Tracks		Y	Y			Y	Y	Y			Y	Y	Y	Y
Playground Equipment												Y		

New facilities or existing facilities upgraded

Facilities	Number	Details
Disabled Access	1	Improved at Sumac
Info/Visitor Centre	1	New signs at Sumac
Toilets	1	Rebuild of disabled toilets at Oldina
Walking Tracks	1	New sinkhole walk at Julius River Forest Reserve

Visitor numbers to specified recreational sites

Site	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Oldina	28,800	28,200	28,500	23,917	22,204
Dismal Swamp ¹	N/A	N/A	N/A	35,800	27,000
Dial Range	12,300	43,600	No data	No data	No data
Dip Falls	13,100	No data	No data	No data	No data
Milkshakes	4,200	4,300	4,500	No data	No data
Noel Jago Walk	No data	No data	381	377	353

1. Actual people counts.

7.1.11 Education

Public and school education opportunities

	No. Presentations	No. People
Public Education		
Forest Tours by FT Staff	11	92
Forest Management Presentations	6	47
Number of positive newspaper articles	19	
School Education		
School Tours by FT Staff	4	84
School Visits	2	60
Students – Work Experience		5

7.1.12 Community Liaison and Sponsorship

Community forums attended by District staff

Community forum categories	Number of meetings 2002-2003	Number of meetings 2003-2004	Number of meetings 2004-2005	Number of meetings 2005-2006
Fire management	6	5	2	4
Catchment management	1	0	2	0
Local emergency management	1	3	0	0
Education	2	2	3	3
Local government	3	3	4	5
Cultural management	0	0	0	2
Biodiversity management	0	0	0	0
Feral animals/weeds	10	8	0	2
Industry	0	4	2	2
Recreation/tourism	10	6	19	17
Regional planning	3	3	4	3
Conservation/environmental	0	0	0	0
Forest practices	2	3	0	2
Other	0	0	5	0
TOTAL	38	37	41	40

District sponsorship

Name of Organisation	Type of Sponsorship (Cash, In Kind)	Value
Penguin FC	Cash	\$350
Irishtown FC	In Kind	\$300
Stanley show	In Kind	\$250
Historic machines	In Kind	\$500
CH Kart club	In Kind	\$500
Science Fair	Cash & In Kind	\$1,350
Wynyard axemans assoc	In Kind	\$455
Wildside	In Kind	\$500
Preolenna Mothers Group	Cash & In Kind	\$227
	TOTAL	\$4,432

7.1.13 Mineral Exploration and Development

- Facilitate the exploration and development of mineral resources found within multiple use forest land consistent with the good management of wood, cultural, natural and recreational values

Mineral Exploration Working Group (MEWG) Referrals

Type	Number
New EL Applications	7
Existing EL Reviews and Development Proposals	0
New Works Programs	21
Mineral Lease Applications	0
Mineral Lease reviews and reports	0
Number of Site Rehabilitations	0