

5 YEAR LOGGING PLAN
NORTHERN JARRAH FOREST

October, 1984

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1. INTRODUCTION

Between 1980 and 1984 hardwood logs from the Northern Jarrah Forest were harvested from areas outside D.R.A. Areas prescribed for logging were delineated on an "Integrated Logging Plan" which covered north and parts of Central Region. Jarrah 81 set standards for logging including environmental protection and silviculture; but only within water production and recreation land use priorities along the Western Scarp (west of D.R.A.).

As dieback areas were cut over problems emerged with continuing to cut in areas set out in the Integrated Logging Plan. For example, many areas of apparently dieback free and susceptible forest had not been quarantined and dieback symptoms were difficult to interpret with consequent high risk of disease spread. The alternative of logging in D.R.A. where dieback maps were reliable and full hygiene could be ensured provided a better option.

Some evidence had been produced from the Amphion/Taree logging trial to suggest logging could be undertaken in D.R.A. without serious spread of disease. These results are interim but new research evidence has been produced on means of predicting site susceptibility and disease spread. The combination of valid dieback plans, interim Amphion/Taree results and site susceptibility research made the return to D.R.A. a better option than continuing logging in dieback free and susceptible forest outside the D.R.A.

Logging within D.R.A. will be subject to meeting full requirements of 'Dieback Policies 1982'. This five year logging plan sets out concepts for planning these operations and the areas to be logged.



G.B. PEET

SUPERINTENDENT

15 October, 1984

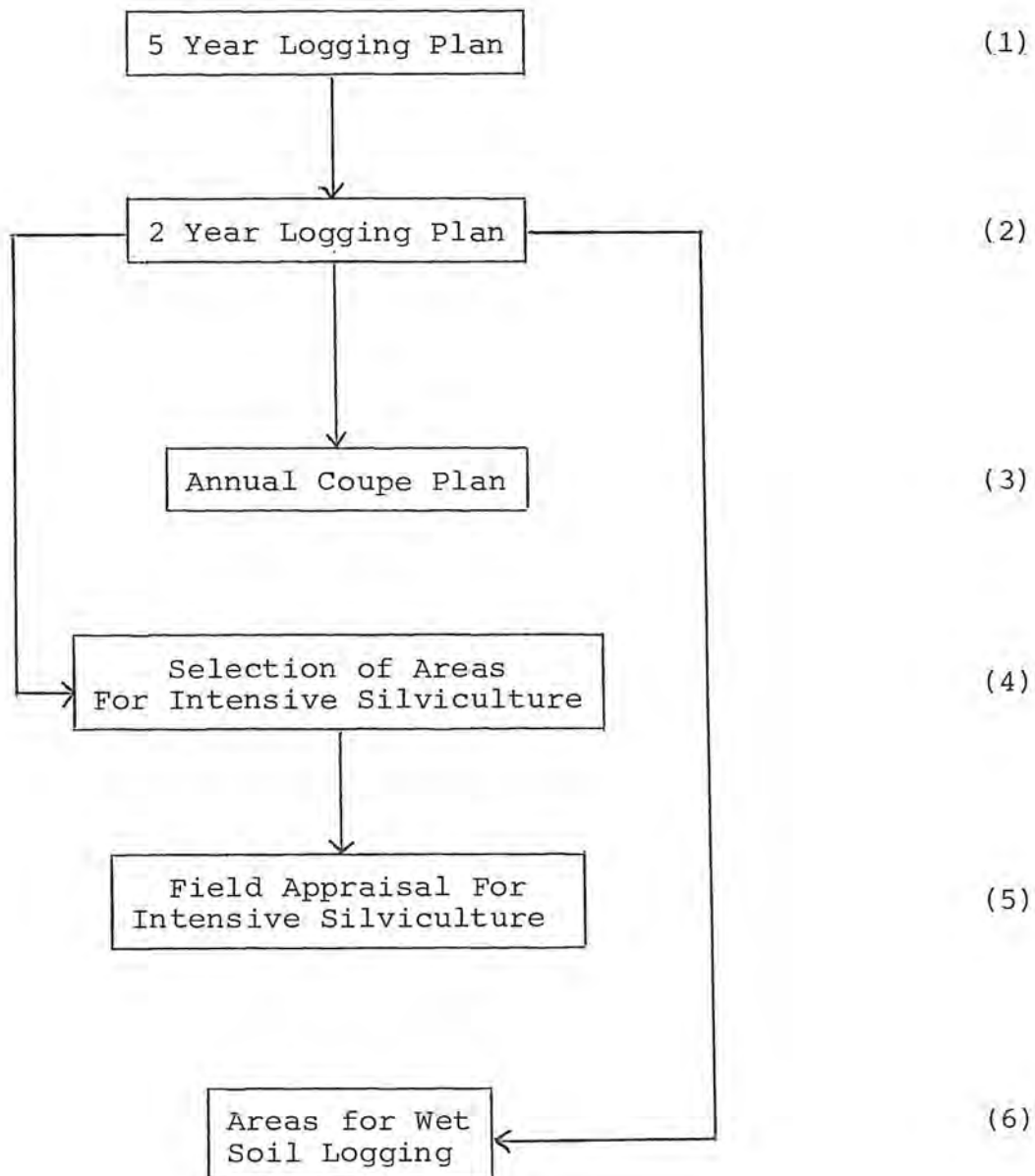
2. SUMMARY OF INTAKES

Division	Sawmill	Permit/License	P/1 cu.m.pa.
Mundaring	Pickering Brook	SMP 856	3,600
	Jaya Pty Ltd	FP(S) L 1601	4,500
	Dale Timber Co.	FP(S) L 1604	4,500
	Colli Kelmscott	FP(S) L 1636	3,600
			<u>16,200</u>
Jarrahdale	Bunnings	SMP 773	36,000
	Whittakers	SMP 1319	22,000
			<u>58,000</u>
Dwellingup	Bunnings	SMPs 1540,1541	min 34,000 *
Total			108,200

* Depends upon the intake of Bunnings Collie Mill. Total of both mills not to exceed 82,000 cu.m.

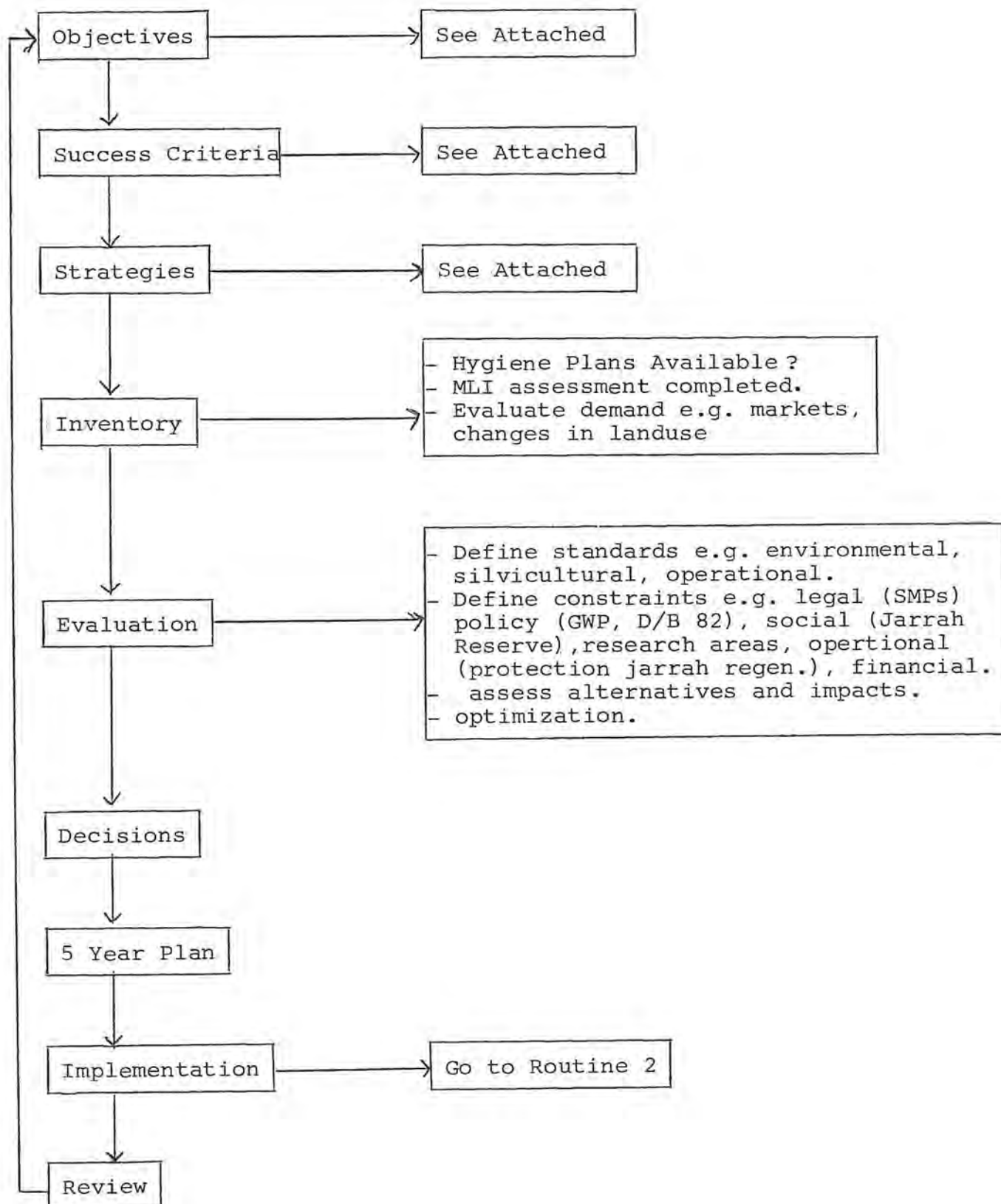
3. STAGES IN LOGGING PLANNING

Index to Routines



4. STRATEGIC PLANNING (5 YEARS) FOR LOGGING

ROUTINE 1.



OBJECTIVE

To develop a broadly based 5 Year Rolling Plan for hardwood logging, in the Northern Jarrah Forest.

SUCCESS CRITERIA

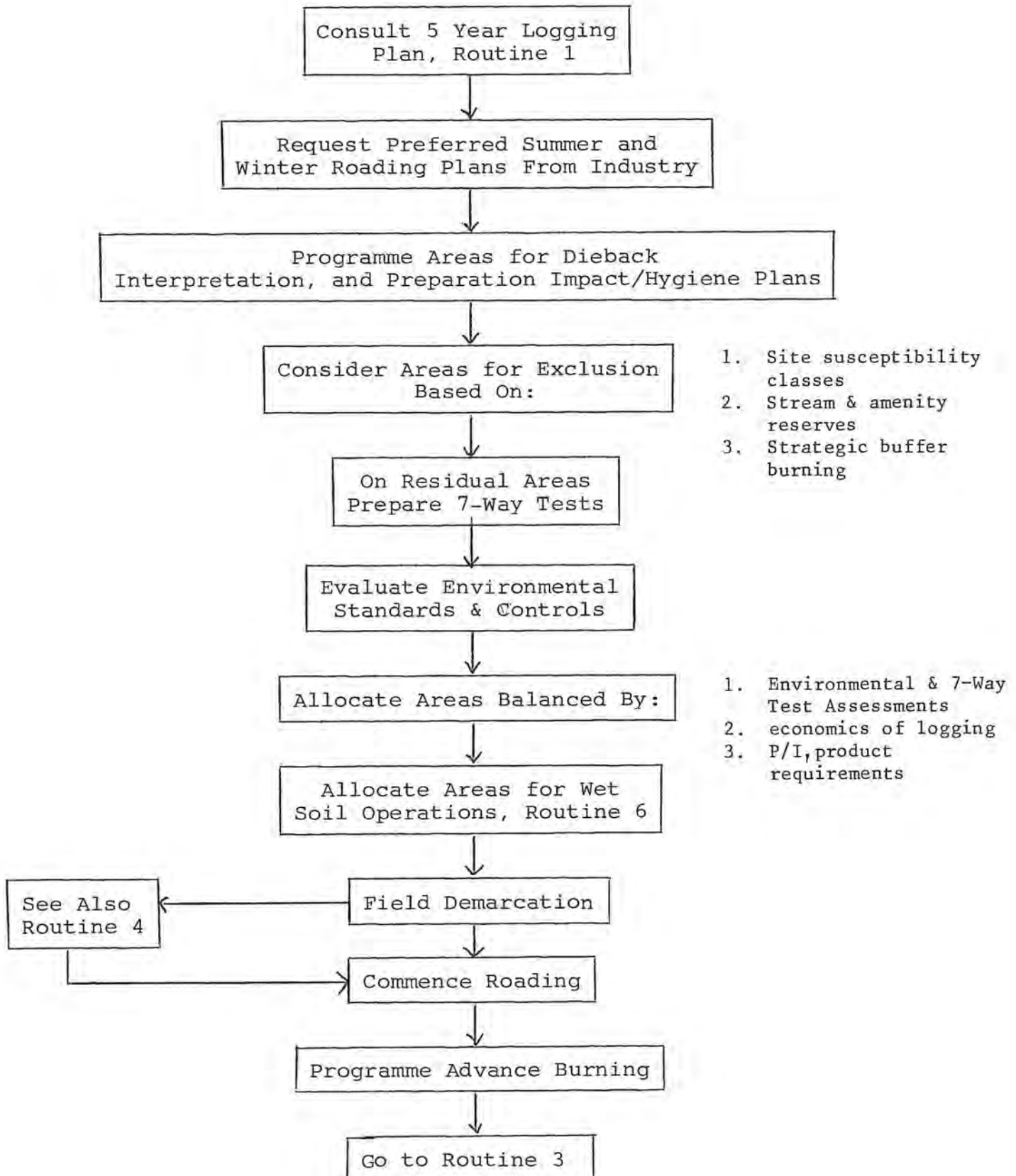
1. minimum environmental impact.
2. minimum spread of P. cinnamomi.
3. maximum silvicultural benefits.
4. conformity with landuse priorities.

STRATEGIES

1. re-direct the industry to D.R.A.
2. Identify and provide sufficient lead-time between planning and operations.
3. Integrate operations, where separate product removals are currently occurring e.g. sawlogs, poles, minor forest produce.
4. Define the silvicultural criteria for log harvesting. This is currently provided by "Jarrah 81" and "Silvicultural Treatment of the Jarrah Forest for Wood Production", by F.J. Bradshaw (1983).
5. Define the work component for log harvesting. This is partly provided in Jarrah 81, but a more specific Code of Logging Practise is to be developed.
6. Define environmental standards for log harvesting. This is provided in "Working Arrangements for Bunnings' Logging Operations in the Northern Jarrah Forest".
7. Seek regular liaison with the Timber Industry.

5. 2 YEAR LOGGING PLAN

ROUTINE 2.

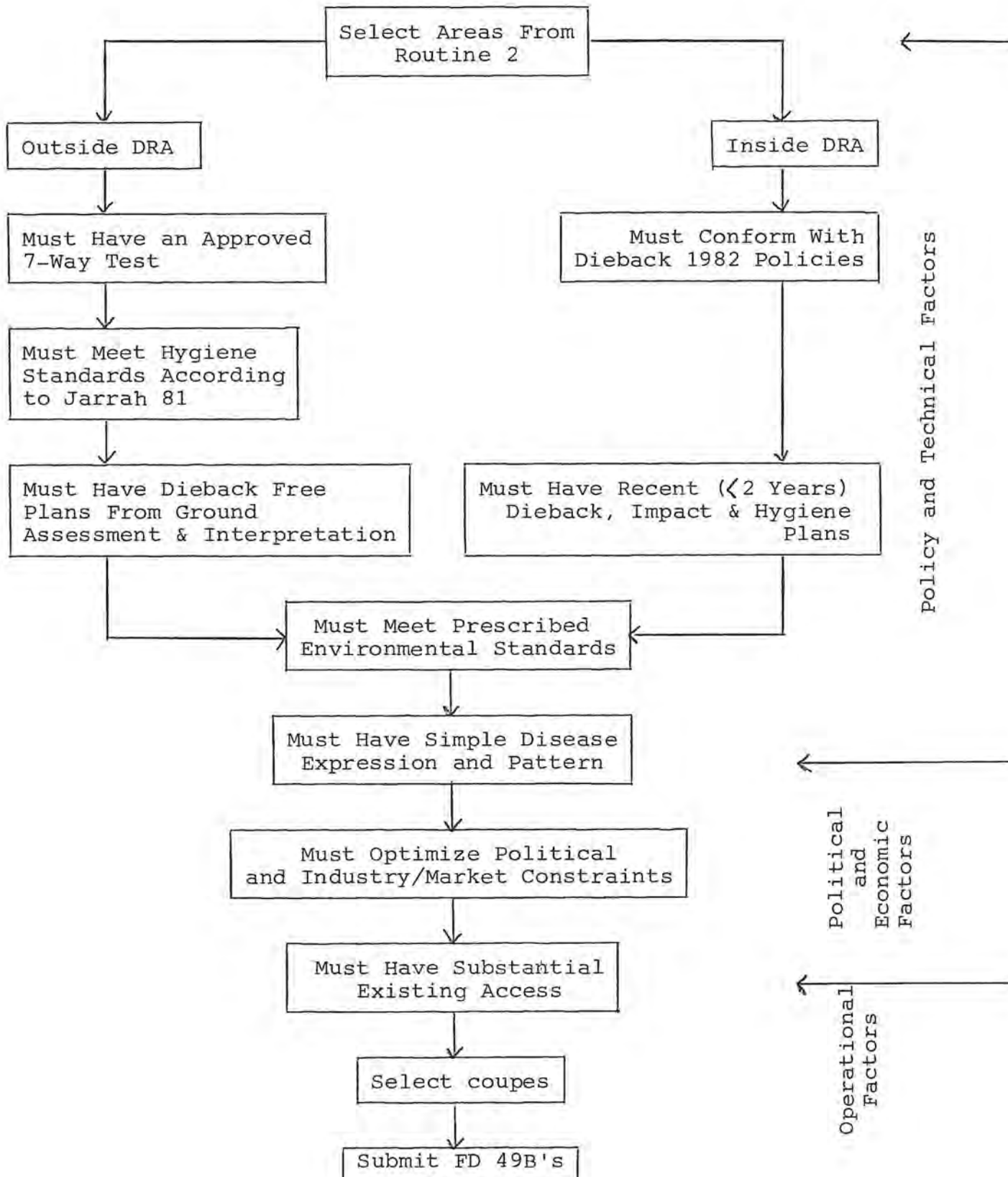


Specific Planning Details for 1985 and 1986

1. With the exception of Whittakers, all log harvesting operations are to be directed inside D.R.A.
2. Sawlog volumes are provisionally allocated at 2 x PI (based on average Block volumes, of latest inventory), to allow flexibility in coupe selection/deletion for:
 - areas which cannot pass the 7-Way Test.
 - areas which cannot fulfill all environmental standards.
 - high and low potential impact sites.
 - the provision of strategic burning buffers to protect jarrah regrowth/regeneration.
 - the provision of other stream and amenity reserves.
 - balances of summer, winter (?) and stockpile cutting.
 - fuel age.

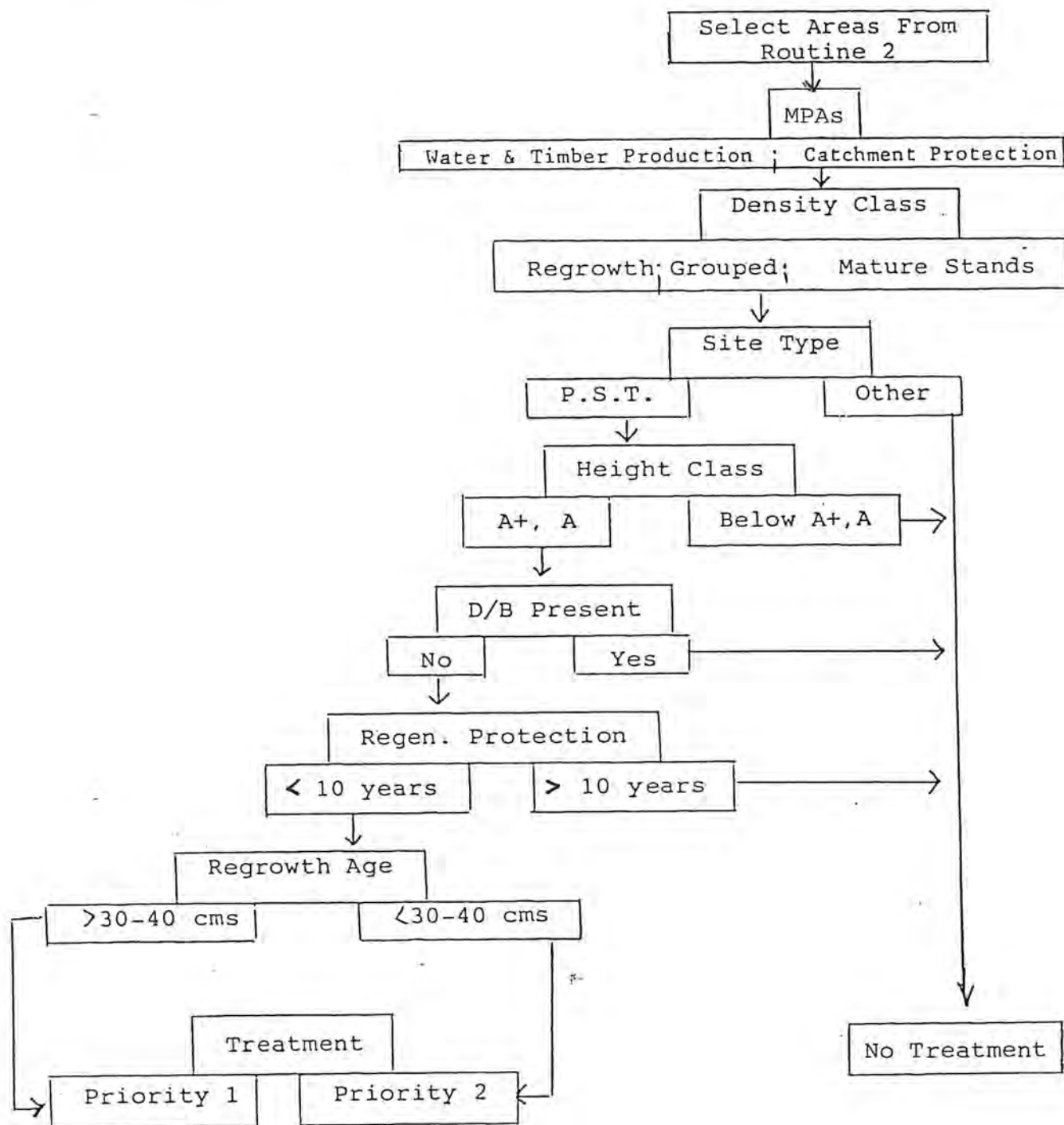
6. COUPE SELECTION FOR ANNUAL LOGGING PLANS

ROUTINE 3.



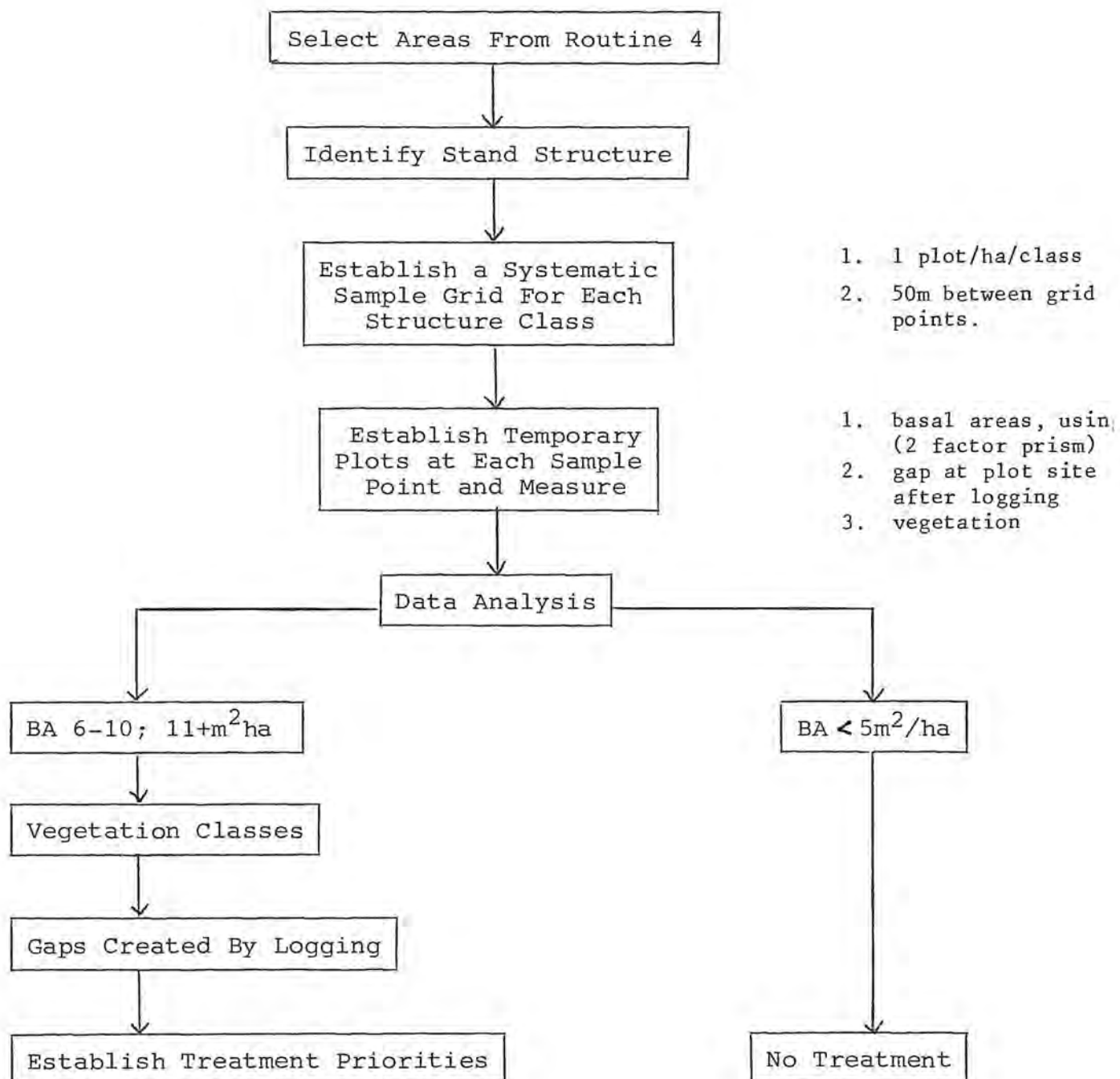
7. CRITERIA FOR INITIAL SELECTION FOR INTENSIVE SILVICULTURE

ROUTINE 4.



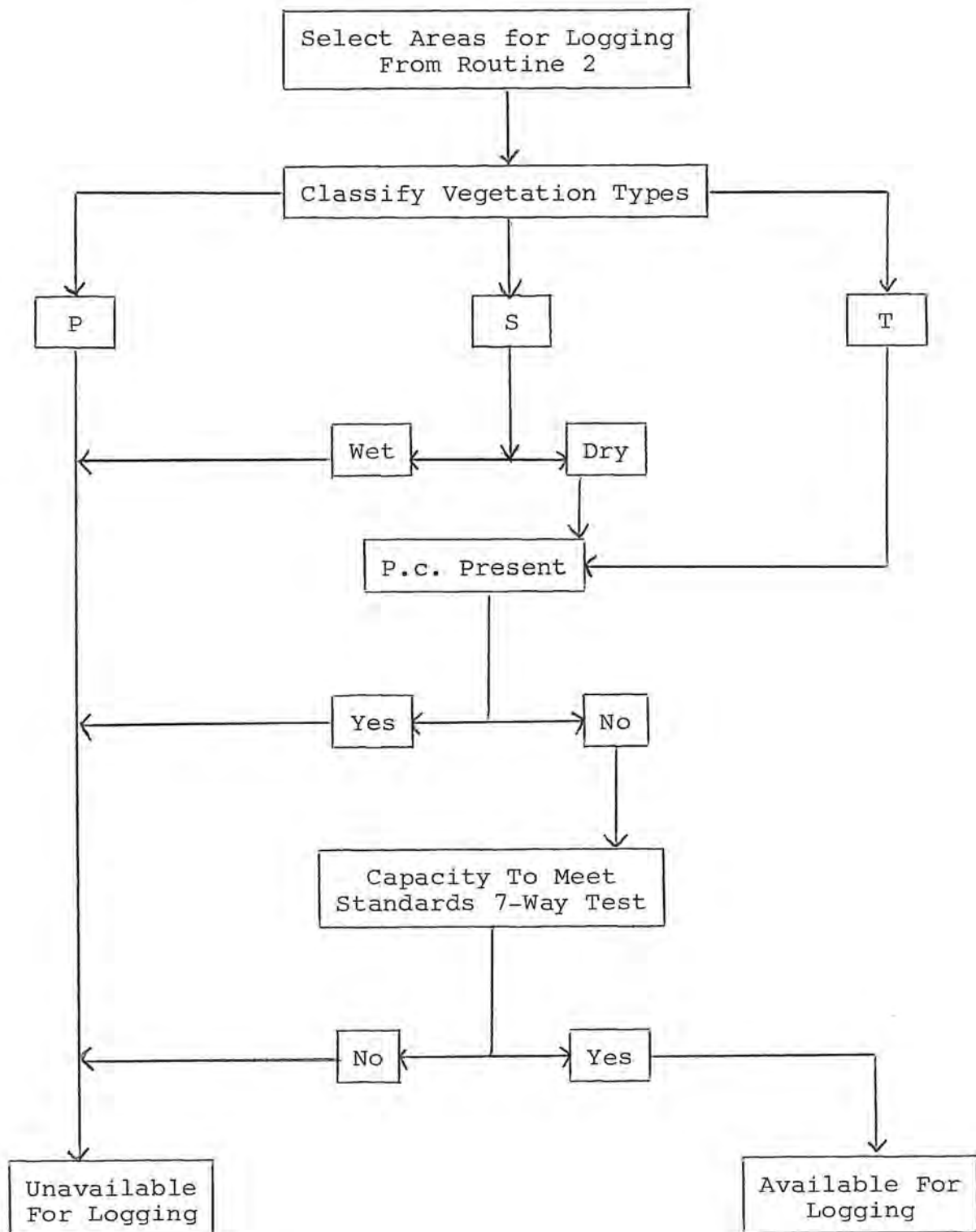
8. FIELD APPRAISAL FOR INTENSIVE SILVICULTURE

ROUTINE 5.



9. AREAS FOR WET SOIL LOGGING

ROUTINE 6.



10. LEAD TIMES IN LOGGING PLANNING

Task	Lead Time (years)	Responsibility	
		Region	Division
MLI	at-5	✓	
Photography	at-3	✓	
Interpretation and Hygiene Plan	at-2	✓	
5 Year Logging Plan	at-2	✓	
Accuracy Test. Applies particularly for old interpretation, and depends upon age, disease dispersal, site susceptibility, changed standards.	at-2	✓	✓
7-Way Test & Environmental Evaluation	at-1 1/2	✓	✓
2 Year Plan) 1 Year Plan)	at-1 1/4		✓
Field Demarcation	by-1		✓
Roading	by-3/4		✓
Silvicultural Selection	by-1/2		✓
Advance Burning	by-3/4 or-1/4		✓
Logging	0		✓

11. NOTES ON SILVICULTURE

1. Comments apply to Water Production, Timber Production, Recreation and Catchment Protection MPAs.
2. Silviculture is as follows:
 - 2.1 the application of "Silvicultural Treatment of the Jarrah Forest", by F.J. Bradshaw (1983).
 - 2.2 the selection of areas for more intensive treatment, as follows:
 - better quality forest.
 - generally Dwellingup landforms, Havel Types T & S.
 - within D.R.A.
3. Strategies required to integrate silviculture with logging are to:

3.1 select and protect crop trees by:

- marking for retention, with removal controlled by coupe and sub-coupe systems, or
- marking for removal.

The objectives of thinning change, once a stand has reached "marketable size". For example:

- heavy thinning can be justified for the initial cut, as this operation involves the removal of suppressed, and/or secondary stems.
- heavy later thinnings will involve the removal of vigorously growing stems, and may result in a loss of bole increment on crop trees.

3.2 Create gaps of sufficient size to:

- develop regeneration.
- protect regeneration from subsequent falling operations.

Within gaps, priority will have to be apportioned, depending on markets, to the:

- development of pole stands, or the
- development of regeneration.

3.3 Silviculture will also utilize strategic and specific burning regimes. Objectives are to optimize:

- | | | |
|--------------------|---|----------|
| - silvicultural |) | |
| |) | |
| - environmental |) | Benefits |
| |) | |
| - hazard reduction |) | |

12. NOTES ON HARVESTING

1. Where multiple products are available from the forest, removals may be undertaken as:

- single)
-)
- consecutive) operations
-)
- concurrent)
-)
- integrated)

2. Administrative and Legal problems occur when separate Contractors or Companies are involved in the removal of each product.

This situation arises, because it is illegal for Contractors or Companies to "trade in logs".

3. A systematic approach to industry control in log harvesting is required as follows:

- must prescribe the Work component in a "Code of Logging Practice", or a "Schedule of Working Arrangements".

The code must comprise definitions of operations in (1), above.

- for each operation, decide the method(s) of product removal, according to definitions in the code.
- quantify the costs, e.g. roading, landing construction, log royalties etc.
- decide upon the arrangement for log exchange, and apportion charges accordingly.
- approve F.D. 49B's, together with signed working conditions from the Contractor or Company.

Where complex working arrangements are anticipated, alternatives exist:

- to remove the contractor from negotiations, and permit only the recipients of logs to sort out forest operations and costs, or
- for the Forests Department to install infrastructures such as roads, and re-coupe costs from contractor and companies.

LEGEND

HARDWOOD LOGGING 1985 - 1989



Logging Year 1985



1986



1987



1988



1989



Areas of certain pole resource



Areas of possible pole resource



No dieback interpretation. Area
subject to logging between 1987
and 1989, inclusive.

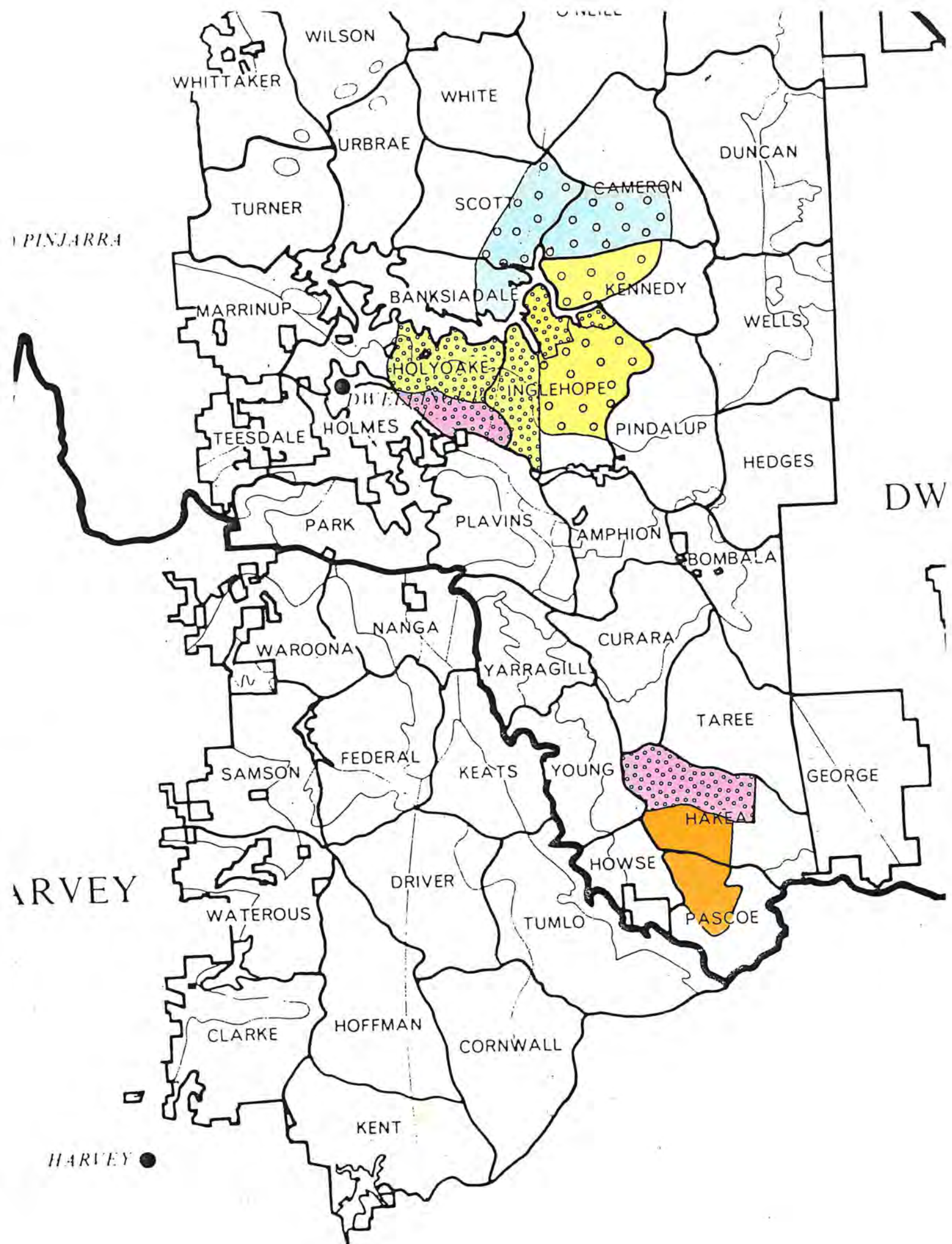
Plan Scale 1:250,000

Bunnings Dwellingup (S.M.P.'s 1540 and 1541)

Year	Area (ha)	Volume (cu.m.)	Blocks
1985	3,313	50,000	Inglehope Kennedy
	1,438	21,000	
	<u>4,751</u>	<u>71,000</u>	
1986	2,063	18,900	Cameron Scott Banksiadale
	1,813	28,100	
	750	13,600	
	<u>4,626</u>	<u>60,600</u>	
1987	1,250	18,900	Inglehope Holyoake
	1,875	48,800	
	<u>3,125</u>	<u>67,700</u>	
1988	1,063	27,600	Holyoake Hakea
	1,875	39,400	
	<u>2,938</u>	<u>67,000</u>	
1989	1,688	35,400	Hakea Pascoe
	1,118	32,700	
	<u>2,796</u>	<u>68,100</u>	

Notes:

1. Check with Research Dwellingup regarding the completion of "hot burn" trials in Hakea Block.



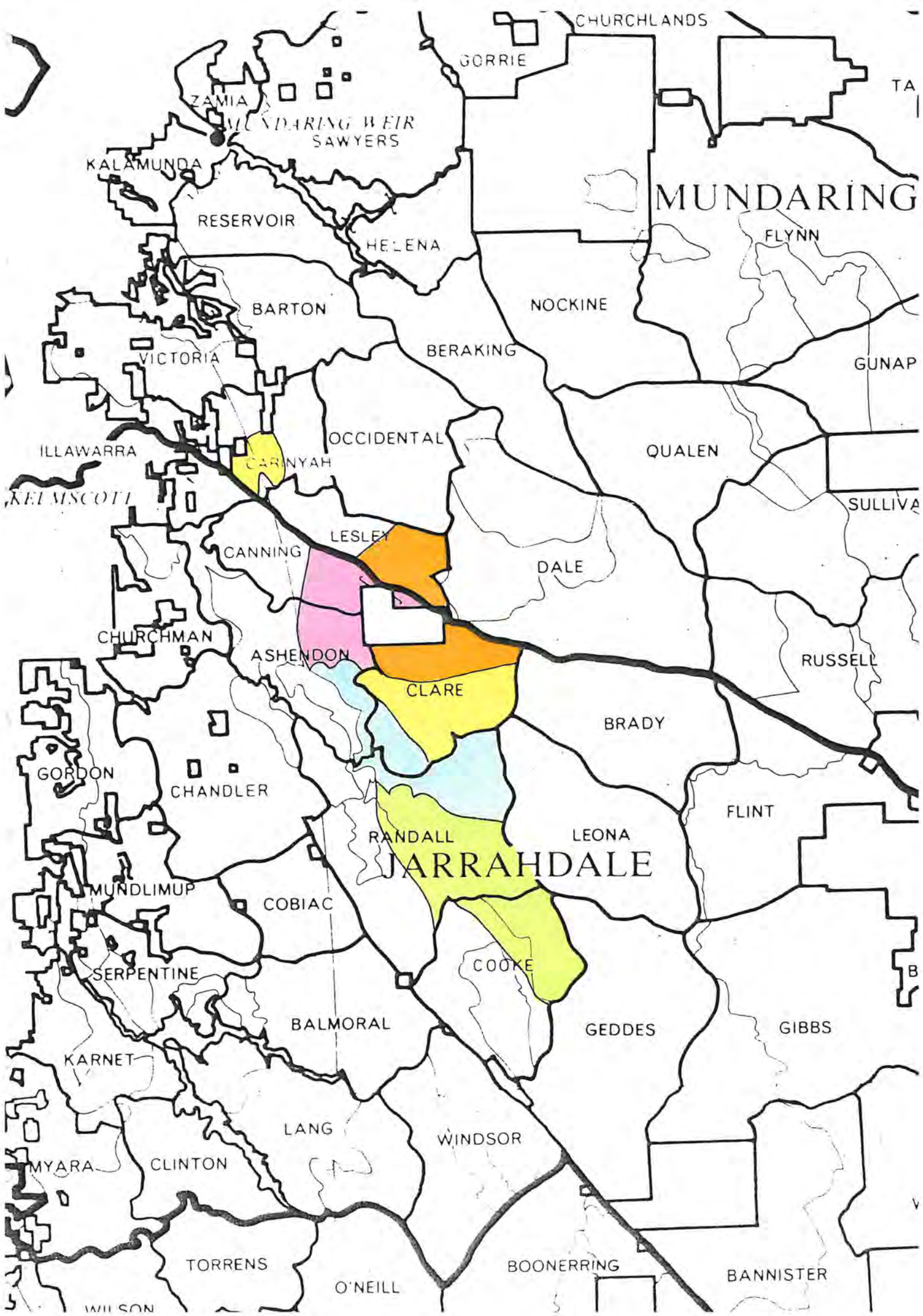
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Bunnings Jarrahdale Mill (S.M.P. 773)

Year	Area (ha)	Volume (cu.m.)	Blocks
1985	688	26,400	Carinyah Clare
	<u>2,563</u>	<u>42,800</u>	
	<u>3,251</u>	<u>69,200</u>	
1986	750	16,800	Ashendon Clare Randall
	845	14,100	
	<u>2,500</u>	<u>31,300</u>	
	<u>4,095</u>	<u>62,200</u>	
1987	3,437	43,000	Randall
	<u>2,313</u>	<u>31,000</u>	
	<u>5,750</u>	<u>74,000</u>	
1988	1,688	47,800	Canning Ashendon
	<u>1,250</u>	<u>28,000</u>	
	<u>2,938</u>	<u>75,800</u>	
1989	1,938	32,400	Clare Lesley
	<u>1,500</u>	<u>42,500</u>	
	<u>3,438</u>	<u>74,900</u>	

Notes:

1. Low MLI volumes in Clare (1985).
2. Complete cutting in Clare, and more into 1986 areas.

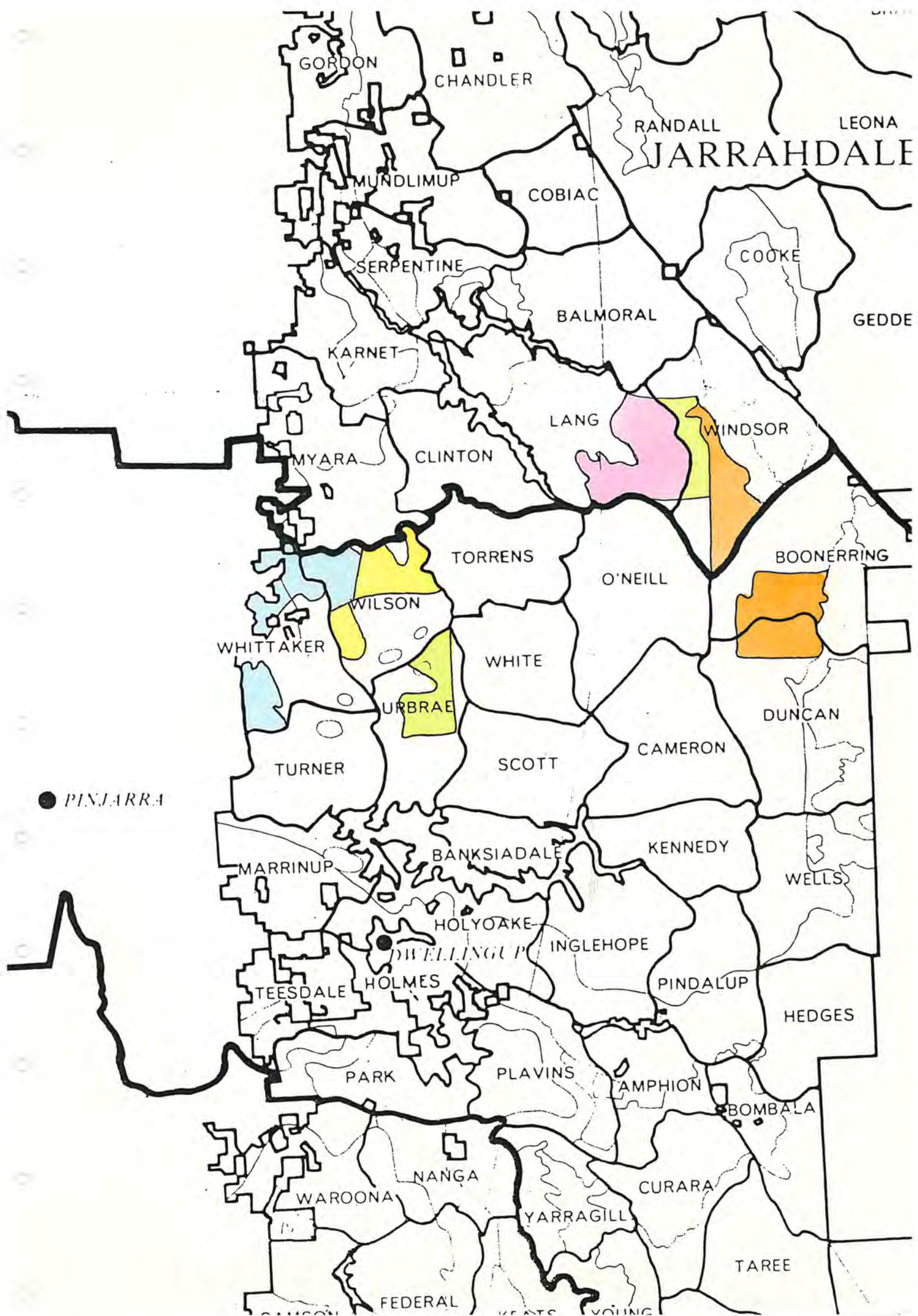


Whittakers Metropolitan Mill (S.M.P. 1319)

Year	Area (ha)	Volume (cu.m.)	Blocks
1985	1,250	30,800	Wilson
	250	6,200	Wilson
	<u>1,500</u>	<u>37,000</u>	
1986	938	14,700	Whittaker
	625	9,800	Whittaker
	562	13,800	Wilson
	<u>2,125</u>	<u>38,300</u>	
1987	1,250	28,900	Urbrae
	938	9,700	Windsor
	<u>2,188</u>	<u>38,600</u>	
1988	2,313	36,000	Lang
1989	1,188	16,000	Boonerring
	875	13,500	Duncan
	1,688	17,400	Windsor
	<u>3,751</u>	<u>46,900</u>	

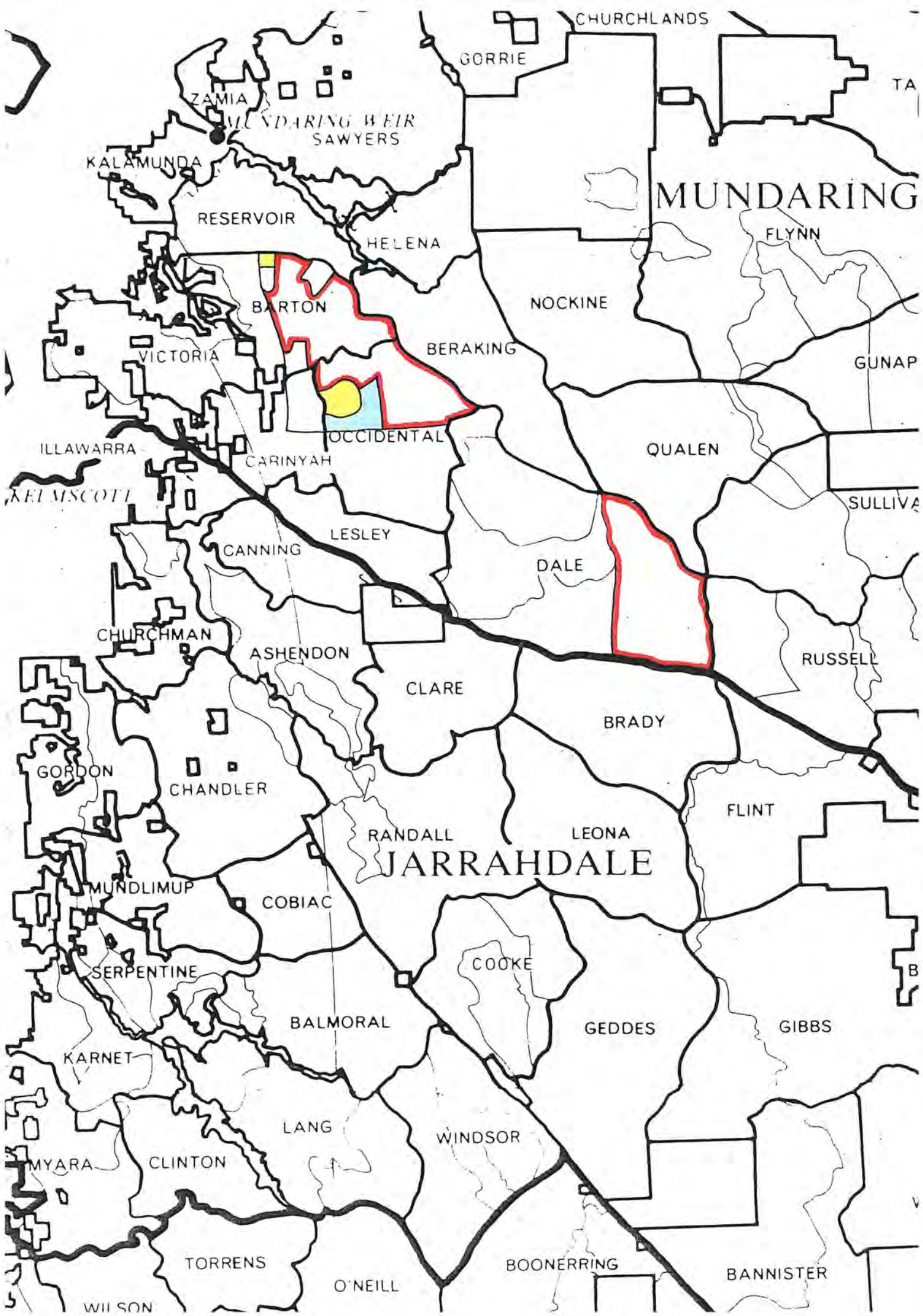
Notes:

1. Trial mining proposed in Urbrae Block.
2. Extensive cutting has occurred in part of Lang and Windsor Blocks. Check MLI records.
3. Steep areas in Lang MPA buffer, along W. boundary.



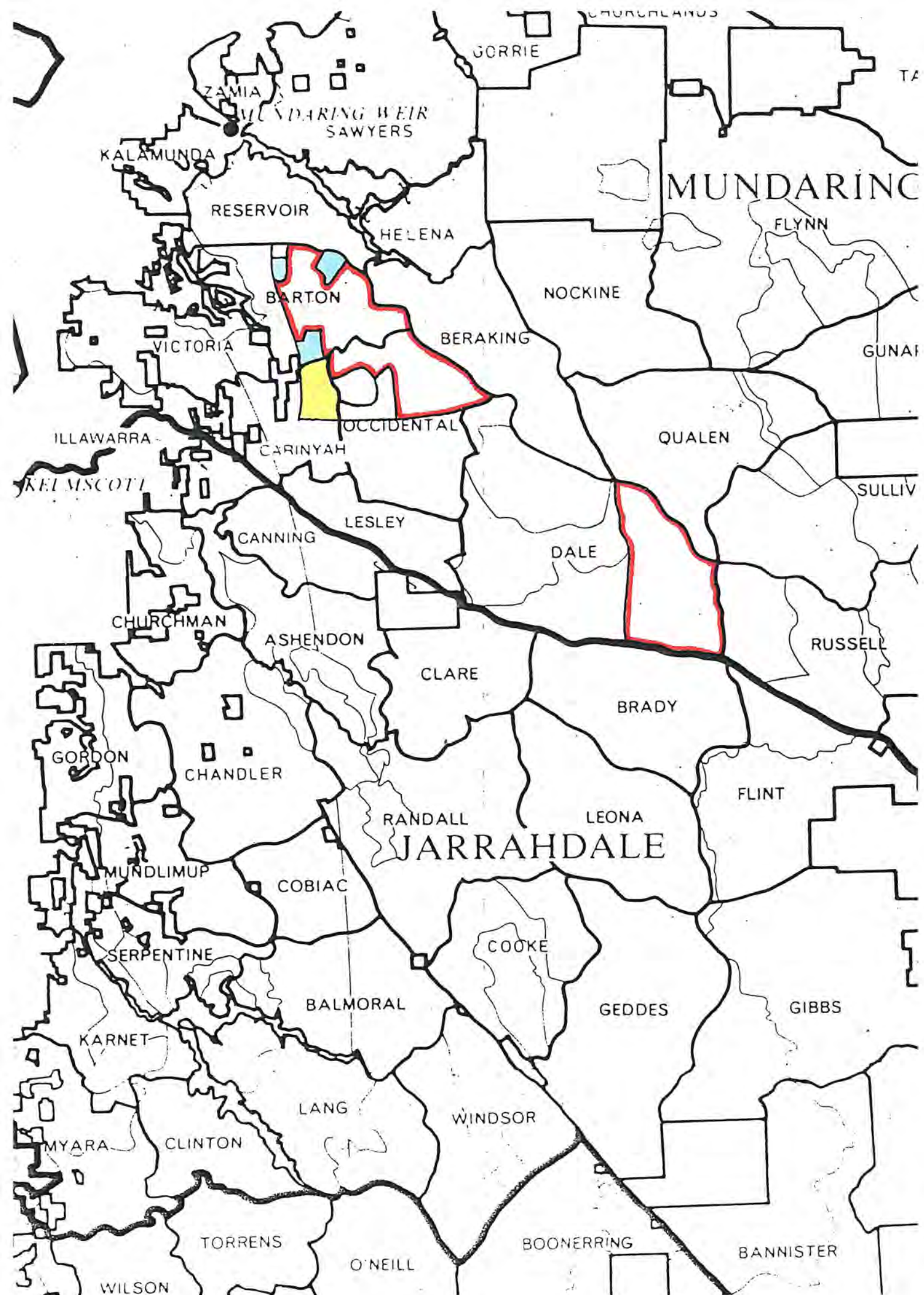
Pickering Brook Sawmills, Pickering Brook (S.M.P. 856)

Year	Area (ha)	Volume (cu.m.)	Blocks
1985	80 <u>304</u> 384	900 <u>7,000</u> <u>7,900</u>	Bartons Occidental
1986	300	7,000	Occidental
1987) 1988) 1989)	Subject to 70mm photography and interpretation programmed in 1985 in Bartons, Occidental and Dale (?) Blocks.		



Colli Kelmscott Mill (F.P. (S) L. 1636)

Year	Area (ha)	Volume (cu.m.)	Blocks
1985	750	9,500	Carinyah
1986	100	1,300	Bartons
	221	2,700	Bartons
	210	2,600	Bartons
		<u>6,600</u>	
1987)	Subject to 70mm photography and interpretation programmed in 1985 in Barton, Occidental and Dale (?) Blocks.		
1988)			
1989)			



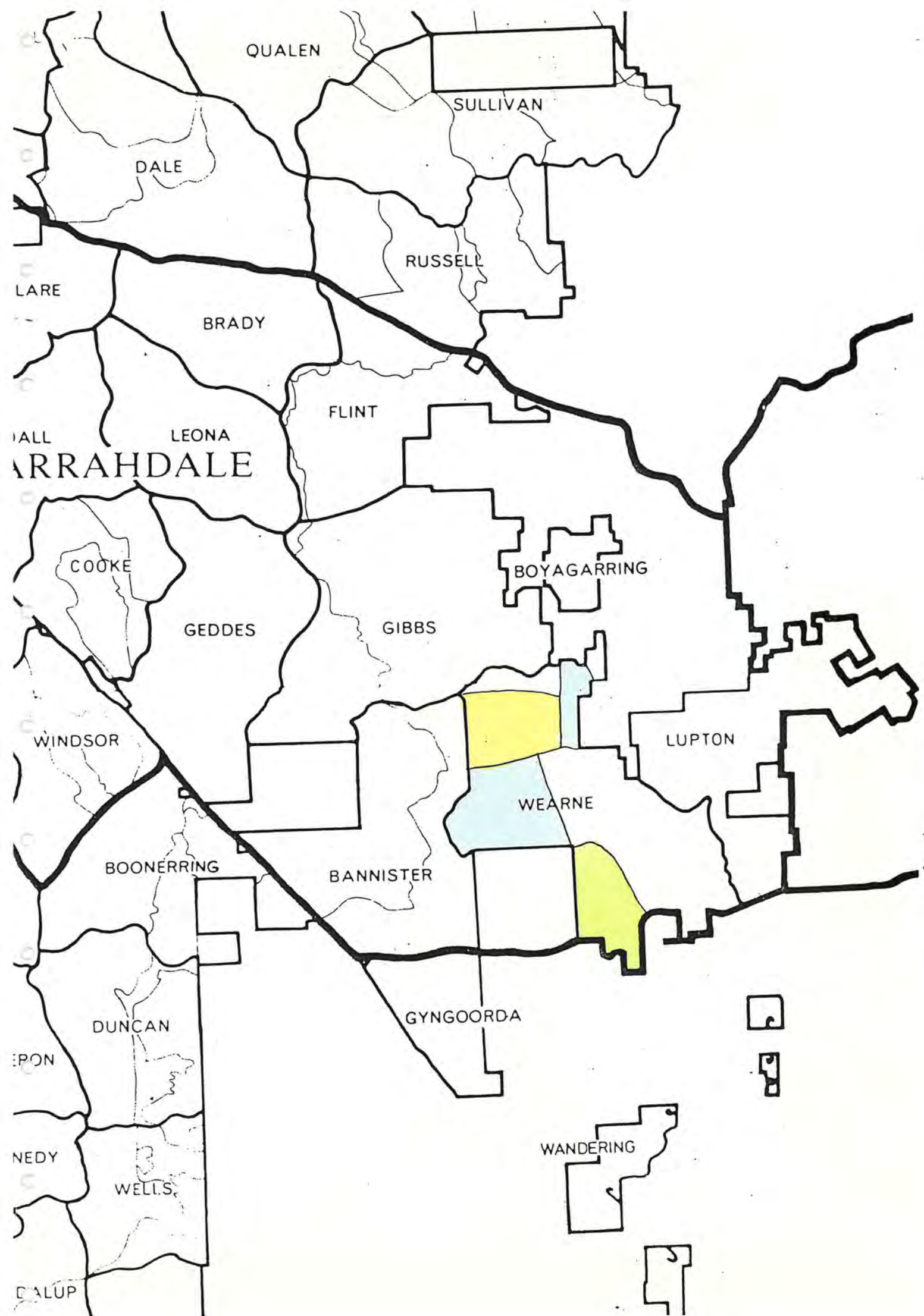
Dale Timber Company F.P.(S) L. 1604

Year	Area (ha)	Volume (cu.m.)	Blocks
1985	2,600	7,100	Wearne
1986	600	1,600	Wearne
	2,200	6,000	Wearne
	2,800	7,600	
1987	2,000	5,400	Wearne

Notes:

1. No known volume after 1987.

- I&P to undertake MLI assessment of areas 8G (Flint, Gibbs) and 8T (Wearne) Blocks, which have been previously cut-over.
- Negotiate silvicultural removals in Talbot, Gunapin, Sullivan and Russell Blocks, outside MPAs, after completion of current G.W.P.



Jaya Pty Ltd (F.P.(S).L. 1601)

Year	Area (ha)	Volume (cu.m.)	Blocks
1985	1,700	6,500	Flint
1986	2,800	7,600	Wearne
1987	3,100	8,400	Wearne

Notes:

1. No known volume after 1987.

- I&P to undertake MLI assessment of areas 8G (Flint, Gibbs) and 8T (Wearne) Blocks, which have been previously cut-over.
- Negotiate silvicultural removals in Talbot, Gunapin, Sullivan and Russell Blocks, outside MPAs, after completion of current G.W.P.

