

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

Swan Region.
3044 Albany Highway, Kelmescott
Fax: (09) 390 7059

Form CLM 80B

To: REGIONAL LEADERS
DISTRICT MANAGERS, PERTH, MUNDARING, JARRAHDAL, DWELLINGUP
MANAGER, MARINE OPERATIONS

Your Ref: SR: 13/11 AWW:jed
Our Ref: A Walker
Enquiries: 390 5977
Phone:

Subject: **INFORMATION BOOKLET - SWAN REGION**

At my request Paul Brennan has collated and compiled an extensive summary of data pertaining to Swan Region. A copy is attached for perusal and comment.

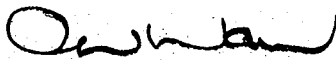
The aim of the document is to provide an accurate and convenient source of information about resources and activities in the Region. The data could be used to prepare papers or presentations in referring to specific or more general facts.

The appendices and tables are on disc and can be readily updated annually, similar to the CALM Annual Report.

Would you please check sections of the document pertaining to your District / Function and suggest additions or amendments if required.

Your comments are required by 8 October 1993.

My commendation to Paul Brennan for his work in compiling this booklet.



ALAN WALKER
REGIONAL MANAGER

13 September, 1993

Copy: Paul Brennan, Forest Management Branch

PAB
20/9/93.

DRAFT

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT
SWAN REGION

(Note: Areas for main tenure groups as 1992/93 Annual Report
Refer Appendix 2 for comparison current and proposed)

CALM's Swan Region extends from the Moore River south along the eastern boundaries of Northam and Wandering Shires and west through Lane Poole Reserve and Peel Inlet. The western boundary follows the ocean and includes Garden, Carnac and Shoalwater Islands and Shoalwater and Marmion Marine Parks. Eastwards the boundary extends inland to take in the towns of Northam, York and Boddington.

The values and management of Swan Region are strongly influenced by Metropolitan Perth and large towns such as Pinjarra and Mandurah. Its boundaries include 2,154,179 ha of land (and sea) of which 694,943.7 ha (32%) is managed by CALM. Excluding the metro area, the region includes 21 local authorities, either in whole or in part, indicating the variety of interests in the land and waters. (Appendix 1)

The Region's management responsibilities include protection and nature conservation, community education, providing for public recreation, and sustainable production of timber and other natural resources, such as wildflowers and honey. Its lands vary considerably in purpose from nature reserves and national parks with a focus on conservation and recreation to State Forest where multiple uses include catchment protection, recreation, nature conservation, timber production and mining.

within the Region
State Forests constitute the bulk of CALM managed lands ~~as proposed~~ (509,504 ha, *or* Appendix 2). Timber Reserves amount to 20,454.1ha. The guiding principle is "sustainable management of all values". Major uses and activities include: *1/3 of all current managed lands*

- Water catchment for Perth and some country areas.
Approximately 90% of the region is within gazetted water catchment areas.
- Mining. Approximately 15 million tonnes of bauxite are mined from about 400 ha annually in state forest at Jarrahdale, and Huntly as part of Alcoa's mining operations. To the end of 1992, 4674 ha of rehabilitation was established at Jarrahdale and Dwellingup (Huntly and Del Park minesites) as follows:

	Dwellingup	Jarrahdale
Jarrahdale	804.87	466.83
Marri	383.74	277.43
Total (all spp)	2439.15	2235.39

The Region's lands support the largest bauxite mining operation in the state with important economic implications.

The gold mines at Boddington are operated as open cut, with an area cleared of approximately 237 ha (combined area Alcoa and Worsley). Removal of approximately 3 million tonnes of ore commenced in 1987. At this time the ore reserves were estimated to be capable of sustaining this level for about 15 years.

All mined lands must be rehabilitated with native species to the satisfaction of CALM.

- In the 1991/92 year, approximately 4100 ha of the jarrah forest was cutover, producing about 63,500m³ of first grade and 30,200m³ of second grade sawlogs (Appendix 3), to supply 13 major sawmills. CALM staff supervise 7 major contractors who supply this sawlog material to the mills and powerpoles to the SEC (Appendix 4). State Forests also cater to a heavy demand for domestic firewood (8,400t in 91/92) and products such as honey, fencing timbers, and wildflowers. There are numerous commercial firewood operators.
- Pine plantations cover 26,186 ha, being mainly *P. pinaster* on the coastal plain at Wanneroo and Yanchep (Appendix 5). In 1991/92 a single contractor (App.4) harvesting these plantations supplied almost 110,000m³ of roundwood to 5 metropolitan mills from an area of 1841 ha (Appendix 6). ~~There is potential for further increases in supply to the reconstituted-board-and-chip industry.~~ *cut out*
- Hardwood plantations, established under sharefarming arrangements, consist predominantly of *E. globulus* (Bluegums). To the end of 1992, approximately 1005 ha have been established, but there is potential for around 80,000 ha to be established in the region, mainly on the Swan Coastal Plain in the Peel-Harvey catchment (Appendix 7).
- Natural and planted forests are a valuable recreation resource with many popular picnic spots and walks, which are heavily used on fine weekends; eg Mount Dale, Gooralong, Blue Rock and Lane Poole, to name a few.

National Parks cover 34,141.2 ha in the Region and protect very significant conservation and recreation assets (Appendix 8). Several new National Parks and extension to existing parks are proposed.

The similar category, **Conservation Parks**, cover some 41,681.7 ha (Appendix 9) (5g reserves - 11,874 ha).

- Yanchep National Park has the heaviest visitation in the state with important historic links as well as prime recreation facilities.
- Other parks such as John Forrest, Walyunga, Avon Valley and Serpentine are popular and subject to considerable visitor pressure. It is important to strike the right balance between public use and conservation and CALM aims to achieve this balance primarily through its management plans.

Nature Reserves currently 50,315.2 ha (Appendix 10) although the System 6 "red book" plan for the Region proposes additional increases in land set aside for conservation purpose. These lands are set aside for management of flora and fauna values.

(Note: Other small reserves - buildings, seed orchards, etc. - Appendix 11)

Marine Parks currently 16,350 ha at Marmion, Shoalwater and Swan Estuary.

Protection

The Region has the overall responsibility of protecting its land from damage. Considerable effort has been directed in fire control and reducing the spread of dieback disease, with an increasing commitment to minimising conflicts associated with potentially damaging recreation activities on the conservation estate. In recent years, more funding has been allocated to redevelop recreation facilities to provide for increased usage by the public.

The Region's staff of 235 (Appendix 12) are trained in fire control and supported by fire detection aircraft at Mundaring and Dwellingup, a fleet of water tankers, communications and heavy equipment for fire suppression. The important technique for minimising large severe fires has been strategic prescribed burning - (over approximately 57,600 ha in 1991/92 H/wood 45,200, S/wood 2897, 9476 NP and NR) - to reduce the heavy litter fuel build-up which is the necessary prerequisite for such fires to develop. The average total area burnt under prescribed conditions per annum for the period 1985-6 to 1991-2 was 56,530 ha (Appendix 13).

Wildfires over the period 1987-88 to 1992-93 burnt out an area of approximately 7550 ha per annum, during the summer months (Appendix 14). (Range 1989/90: 1966 ha; 1988/89: 16180 ha). These fires are very costly to suppress and put many lives and property at risk.

The Department's dieback policies were last reviewed in 1992 and are applied by the districts to all operations in susceptible vegetation types from the forested hills to the woodlands and heaths of the coastal plain. Criteria for risk and impact on the vegetation are assessed, and the

necessary dieback hygiene requirements are identified for all activities such as mining, harvesting, roading and recreation sites (through the 7-Way Test).

There are also programs for control of weeds and feral animals which could be justifiably increased with a larger budget.

ADMINISTRATION

The operations of the Region are conducted from four district offices at Wanneroo, Mundaring, Jarrahdale and Dwellingup with a regional headquarters at Kelmscott.

The Perth District (based at Wanneroo) is the most northerly District and its principal responsibilities are the management of a large pine plantation, Yanchep National Park, several smaller Parks and several large Nature Reserves and requirements for protecting the Gngara and Jandakot underground water supply areas and wetlands of the Swan Coastal Plain. Eight Regional Parks are proposed within Perth District.

Mundaring District extends from the Julimar (Wandoo) Conservation Park in the north to the Brookton Highway. Management is complicated by the interface between urban development and natural lands in the Darling Scarp (proposed Regional Park). Priorities include recreation in "The Hills Forest", protection of water catchments and a number of important national parks (including John Forrest and Walyunga) and numerous nature reserves.

Jarrahdale District extends from Brookton Highway to a boundary south of Serpentine Dam. Protection of water catchment, recreation (Langford Park and Gooralong), supervision of bauxite mining and timber production (especially firewood) are the primary activities. Urban development along the scarp is becoming an increasingly important issue there. On the Swan Coastal Plain there are several important Nature Reserves and proposed Regional Parks. Major developments are occurring at Shoalwater Islands including upgraded facilities at Penguin Island and a major interpretive display at Mersey Point.

Dwellingup District is the most southerly. Likewise it has important commitments to bauxite mining and timber production, with management of recreation at Lane Poole reserve along the Murray River an important additional responsibility. Dwellingup District also includes Nature Reserves at Peel Harvey estuary.

Swan Region Marine Operations are based at Marmion Marine Park, Hillarys. A staff of four patrol this Marine Park, Shoalwater and Swan Estuary Marine Parks and other State waters within Swan Region. Some recreation and interpretive projects have been developed and extensive liaison is conducted with Fisheries Department, Marine and Harbours Department and other agencies to regulate activities with the marine parks. Marine parks account for 16,350 ha.

SHIRE BOUNDARIES - SWAN REGION

- + External boundary
- / Unclassified
- 1 Armadale/Kelmscott
- 2 Beverley
- Boddington
- 3 Brookton
- 4 Chittering
- 7 Gingin
- 8 Gosnells
- * Harvey
- 9 Kalamunda
- # Mandurah
- D Mundaring
- Z Murray
- F Northam
- H Serpentine/Jarrahdale
- K Swan
- L Toodyay
- N Wandering
- P Wanneroo
- J Waroona
- I Williams
- Q York

1 Note - Z is the last code

(Provisional figures for 1993 Annual Report)

SWAN REGION

	(Ha)
State Forest	509504.6
Timber Reserve (CALM Act)	20454.1
National Park	35192.1
Nature Reserve	50315.2
Marine Park	16350.0
Marine Nature Reserve	-
5g Reserve	11874.0
Conservation Park	41681.7
Miscellaneous Reserve	5948.0
Freehold (in name of Exec. Dir.)	3624.0
Leasehold (in name of Exec. Dir.)	-

Alan Walker
 Manager, Swan Region

SWAN REGION TENURE CATEGORIES

The following information is provided in response to your fax of 15 April 1993. Figures are from interrogation of the FMIS data base. Existing tenure is from manually coded data and is current as at 30 June 1992. The proposed tenure was digitised and is consistent with the draft Forest Strategy.

	<i>AREAS IN HECTARES</i>	
	Existing (30.6.92)	Proposed
State Forest ³	519,200	444,800
Timber Reserve	26,300	0
National Park	34,200	45,500
Nature Reserve	37,100	68,900
Conservation Park		123,900
5(g) reserve)	52,700 ²	11,900
Other reserve)	-	600
Marine park	-	16,400
Total CALM	669,500 ¹	712,000

- 1 Does not include the area ex Metropolitan region.
- 2 Cannot isolate 5g from other reserves. 52,200 ha vested in NPNCA, 200 ha vested in LFC and 300 ha vested in Exec. Dir.
- 3 Includes Exec. Dir. freehold land.

(signed)
 P Collins
 Forester (Tech)
 Forest Management Branch, Como

16 April 1993

HARDWOOD REMOVALS m³ - SWAN REGION

Year	1st Grade	2nd Grade	3rd Grade	Special	Firewood (t)
1990/91	48,300	22,800	30		20,200
1991/92	63,450	30,190		270	8,389
1992/93 (as at 1/9/93)	64,400	25,800	120		31,200

AREA STATE FOREST HARDWOOD CUTOVER SWAN REGION

CODE	AREA (ha)	DESCRIPTION
+	457019.91	External boundary
/	1618607.13	Unclassified
A/	47735.06	Cutover < 1920
B/	23240.14	Cutover 1920-29
C/	63403.14	Cutover 1930-39
D/	33300.09	Cutover 1940-49
E/	69663.28	Cutover 1950-59
F/	118135.06	Cutover 1960-69
G0	11200.49	Cutover 1970
G1	12937.89	Cutover 1971
G2	12744.84	Cutover 1972
G3	12855.16	Cutover 1973
G4	11671.28	Cutover 1974
G5	8811.08	Cutover 1975
G6	8531.36	Cutover 1976
G7	10105.26	Cutover 1977
G8	6786.09	Cutover 1978
G9	6545.77	Cutover 1979
H0	7510.99	Cutover 1980
H1	7538.57	Cutover 1981
H2	7556.29	Cutover 1982
H3	6289.69	Cutover 1983
H4	5162.94	Cutover 1984
H5	6344.84	Cutover 1985
H6	4898.98	Cutover 1986
H7	4558.20	Cutover 1987
H8	5336.29	Cutover 1988
H9	3758.45	Cutover 1989
J0	3579.19	Cutover 1990
J1	2265.31	Cutover 1991
J2	4095.29	Cutover 1992
V/	9012.00	Virgin Forest

Total area excluding codes '+' & '/'	=	535573.06 ha
Total area excluding code '+'	=	2154180.25 ha
Grand total area	=	2611199.75 ha

HARDWOOD CUSTOMERS - SWAN REGION

No.	NAME	LOCATION	PRODUCT
2	Colli & Sons	Mundijong	JSL/JSV
3	Coli Timber Merchants	Dale, Brookton H'way	JSV
4	Bunnings	Jarrahdale	JSL
5	SECWA	Dirkbrook Pole Dump	Poles
6	Pickering Brook S'mills	Pickering Brook	JSL/JSV
7	Wesfi Peeler Plant	Victoria Park	S/W + H/W
13	Coli Timber Merchants	Gosnells	JSL/JSV
20	Coli Timber Merchants	Mandurah	JSL/JSV
53	Hamilton Sawmills	Osborne Park	JSL/JSV
59	Muller F & Co	Wandering	Wandoo JSL/JSV
61	Fort AM & SJ	Dwellingup	Firewood
67	Ashfield Sawmill	Bayswater	JSL/JSV
68	Jarra Case Factory	Bayswater	JSL/JSV
69	Wake & Beacham	Narrogin	Wandoo
73	Steffanelli Sawmillers	Middle Swan	JSL/JSV
77	Pinetec	Bassendean	JS4 Thinnings Pallets
100	K Caporn	Swanview	Firewood
101	A L Fulgrave	Bedfordale	Firewood
103	J Keighley	Swanbourne	Firewood
104	I & G Zanki	Hamilton Hill	Firewood
105	G Beaman	Westfield	Firewood
106	D Beaman	Westfield	Firewood
107	B Nettleton	Medina	Firewood
108	R & P Slater	Cloverdale	Firewood
109	Pieri Timber Supplies	Hazlemere	Firewood
110	C Atwell	Mundijong	JFW, JNP
112	G Haggett	Dwellingup	Firewood
113	Ashkate Timber	Keysbrook	JFW, JNP
114	SPD Wood Supplies	Swanview	Firewood

HARDWOOD CUSTOMERS - SWAN REGION (Cont.)

NO.	NAME	LOCATION	PRODUCT
117	Bushwood Supplies	East Victoria Park	Firewood
118	B L Taylor	Beechboro	Firewood
119	Merenda Transport	Balcatta	Firewood
120	Wesfi MDF	Kewdale	S/W + H/W
122	O Readhead	Glen Forrest	Firewood
132	Nguyen Van Chac	Byford	
143	D & R Kennedy	Mundaring	Firewood
151	Munut	Kelmscott	Firewood
153	C & J Russell	Narrogin	Wandoo
155	Ridolfo Firewood	Dirkbrook	Firewood
164	Inglewood Products	Malaga	Sheoak
165	Timber Traders	Cockburn Sawmills	JSL/JSV
181	B Francis	Pickering Brook	Firewood
182	Walliston Firewood	Lesmurdie	Firewood
198	Coli Timber Merchants	Dwellingup	JSL/JSV
207	Colli & Sons	Dwellingup	JSL/JSV
209	Deadwood Sawmilling	Portable Mill	JSJ
219	Slater & Scaffidi	Lesmurdie	Firewood
	Kaleema Sawmills	Malaga	
	Kelmscott Recycling Plant	Kelmscott	Firewood
	P Feeney		Firewood

SOFTWOOD CUSTOMERS - SWAN REGION

No.	NAME	LOCATION	PRODUCT
7	Wesfi Peeler Plant	Victoria Park	Peelers for Veneer
76	Bunnings	Mundijong	Treated Pine Rounds
77	Pinetec	Bassendean	S2 + S4, Pallets - Packing cases
80	Western Case + Joinery Works	Osborne Park	S4
120	Wesfi MDF	Kewdale	Ind. Wood
144	YMCA		Christmas Trees
178	Paraquad		Christmas Trees
243	Life in Focus		Christmas Trees

**HARDWOOD LOGGING CONTRACTORS (INTEGRATED ONLY)
SWAN**

Number	Name
102	Bunnings Forest Products
105	Ridolfo
111	M Fort
116	Pickering Brook
117	C.O.P. Transport
119	Merenda
124	Munut

SOFTWOOD LOGGING CONTRACTORS - SWAN

Number	Name
122	Softwood Logging Services - D Burmas

920910

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

Form CLM 808

To: AS PER DISTRIBUTION BELOW

Your Ref: 028246F2501 PC:HF
Our Ref: Ms P Collins
Enquiries: 367 0416
Phone:

Subject: PLANTATION AREA STATEMENTS

The enclosed information was prepared on request for the Director of Forests. You may find it a useful reference, particularly for your region. A similar statement will be prepared for broadleaved species.

Plantation area details are maintained on the FOCIS system. While several standard reports can be generated from FOCIS this information was prepared as a spreadsheet.

I would like to take this opportunity to invite you to anticipate requirements for plantation details and offer suggestions for outputs from FOCIS. I have already had one or two requests to record the steep and flat classifications and would appreciate comments on its value.

Comments are required by the end of October, prior to the next FOCIS Project Team meeting.

P M Collins
FORESTER (TECH), INVENTORY BRANCH

8 October, 1992

Distribution:

- Manager, Swan Region, Kelmscott
- Manager, Central Forest Region, Bunbury
- Manager, Southern Forest Region, Manjimup
- Manager, South Coast Region, Albany
- Manager, Inventory, Kelmscott
- Manager, Inventory, Bunbury
- Manager, Inventory, Manjimup
- G Heberle, Como
- J Kaye, Bunbury

*Any comments pl.
O.G.I.S area statement
will supersede this
pine area statement.
2. Elin, please photocopy
DL... for Kot personal copy - Kim
& LAND MANAGEMENT*

13 OCT 1992

INVENTORY SECTION
3042 ALBANY HIGHWAY, KELMSCOTT WA 6111

NOTE E ACTION	
ENT	ENT
FOR	FOR
C/O	C/O
All Staff	All Staff
EN 2.3	

*M/13/10
PB PB 14/10
KA KA14/KO
DW*

Much better presentation!

SOFTWOOD VOLUMES

(Removed 1989/90 to April 1993)

(Rounded to nearest 50m³)

(Total by Products)		I.W.	S1,S2 & S3	S4	Rounds 1 & 2	Xmas Tree
(32550)	89/90	1150	11250	17100	3050	-
(42450)	90/91	26150	2350	12450	1300	200
(121100)	91/92	101450	2550	15650	1350	100
(109750)	92/93 (Apr)	80800	3250	20900	4700	100

	I.W.	S1,S2 & S3	S4	Rounds 1 & 2	Xmas Tree
Commitments (1993/94) as at May 1993	85000	5000m ³	23000m ³	5000m ³	200m ³

SOFTWOOD - SWAN REGION

	1988/89 (ha)	Pin.& Rad. 1989/90 (ha)	Pin.& Rad. 1990/91 (ha)	Pin.& Rad. 1991/92 (ha)
Thinned	717	789	852	1742
Clearfelled	126	236	236	99
Planting	79	61	17	37.9

Unofficial areas 1992/93:

Thinned	2706 ha (July 1 1992 to April 1993)
Clearfelled	89.8 ha
Planting	360 ha

**EUC. GLOBULUS SHAREFARMS
SWAN REGION**

District	Planting Year	Plantation	CPT	Area	Owner
Jarrahdale	1988	Karnup	1	77.0	Wigg, A
	1988	Wellard	1	3.2	Fitzpatrick
	1989	Wellard	1	13.7	Fitzpatrick
Dwellingup	1988	Pinjarra	1	161	Alcoa
			2	209.8	Alcoa
			3	303.4	Alcoa
			4	191.1	Rhone Poulenc Chimie
Dwellingup	1989	Lakes	1	46.5	George Weston Foods

NATIONAL PARKS VESTED IN N.P.N.C.A.

(As at 30 June 1992)

(Not including proposed parks)

SHIRE	NUMBER	NAME	AREA (HA)	COMMENTS
Gingin	C↑28462	Moore River	17542.6	
Kalamunda	A↑21314	Kalamunda	374.9	
	A↑22515	Lesmurdie Falls	35.0	
	A↑26247	Lesmurdie Falls	20.6	
	A↑30200	Gooseberry Hill	32.9	
Mundaring	A↑7537	John Forrest	1508.2	
	A↑8164	John Forrest	0.0	Cancelled
	A↑25313	Greenmount	57.6	
Serpentine / Jarrahdale	A↑28862	Serpentine	635.1	
	A↑39825	Serpentine	3727.0	
Swan	A↑2065	Walyunga	1811.9	
	A↑30192	Avon Valley	4368.4	
Wanneroo	A↑9868	Yanchep	2842.0	
	A↑24581	Pt Neerabup	116.4	
	A↑27575	Neerabup	1068.6	
		Total	34141.2	

CONSERVATION AND/OR RECREATION RESERVES
Vested in CALM
(As at 30 June 1992)

SHIRE	NUMBER	PURPOSE	AREA (HA)	VESTING / COMMENTS
Armadale	C↑21569	Recreation	27.4	NPNC A
Boddington	A↑39822	Conservation	2593.3	NPNC A / Lane Poole Res.
Beverly	A↑39824	Conservation	5798.3	NPNC A / Dale Cons. Park
	A↑39844	Conservation	0.4	NPNC A / Dale Cons. Park
Brookton	C↑26666	Conservation	9327.6	NPNC A / Lupton Cons.
Gingin	C↑21164	Cons. & Rec.	39.6	NPNC A
Murray	A↑5102	Rec. & Parkland	221.0	Executive Director
	A↑39819	Conservation	1545.0	NPNC A / Lane Poole Res.
	A↑39820	Conservation	3027.5	NPNC A / Lane Poole Res.
	A↑39827	Recreation	12359.0	NPNC A / Lane Poole Res.
	A↑39840	Conservation	80.9	NPNC A / Lane Poole Res.
	A↑39841	Conservation	64.7	NPNC A / Lane Poole Res.
	A↑29843	Conservation	0.4	NPNC A / Lane Poole Res.
Wandering	A↑39826	Conservation	15417.9	NPNC A / Monadnocks Cons.
Waroona	A↑39823	Conservation	2582.5	NPNC A / Lane Poole Res.
	A↑39842	Conservation	64.7	NPNC A / Lane Poole Res.
	A↑39845	Conservation	0.4	NPNC A / Lane Poole Res.
		TOTAL	53150.6	

**NATURE RESERVES VESTED IN CALM
(NPNCA OR EXECUTIVE DIRECTOR)**

(As at 30 June 1992)

SHIRE	NUMBER	NAME	AREA (HA)	COMMENTS
Armadale	A↑1821		6.6	Metro
	C↑19662		138.1	
	A↑24781		246.2	Metro
	C↑36594		40.3	Metro
Beverly	A↑26897	Dobaderry	16.2	
	C↑33188	"	802.4	
	C↑34442	"	1895.6	
	C↑37306	"	1307.4	
Boddington	A↑32448	Moorapulling	631.7	Previously Mooradung
Brookton	C↑19740	Bartram	58.1	
	A↑36063	Strange Road	553.2	Now vested in NPNCA
	C↑36742	Brookton H'way	378.0	
	C↑38420	Wills	36.2	
	C↑41850	Boyagarring	1208.7	Was Boygarring block
Chittering	C↑42	Burroloo Well	10.7	
	C↑965	Udumung	164.2	
	A↑4070	Barracca	17.4	
	A↑29538	Chittering Lakes	230.5	
	A↑32807	Mt Byroomanning	181.3	
	A↑37060	Chandala	135.9	
Cockburn	A↑15556		551.0	Metro
	A↑26646		18.8	Metro
	A↑29241		253.7	Metro
Kalamunda	C↑23076		19.7	Metro
Kwinana	C↑36110		30.6	Metro
Gingin	A↑1224	Brand Highway	116.8	Previously camping res.
	C↑9676	Yurine Swamp	29.7	
	A↑9838	Lake Wannamal	159.6	
	C↑15816		35.5	
	A↑24436		0.0	Cancelled
	C↑26756	Bampanup	101.0	
	C↑29905	Nabaroo	8.1	
	A↑31241	Yeal	337.0	
	C↑34761	Gingin Stock Route	49.7	Pt Nth of Gingin Brook Rd cancelled in 1986
	A↑38649	Mogumber	40.5	
	A↑39050	Wannamal	24.9	
	C↑41805		9250.0	
C↑41830		4722.2		
Melville	A↑35066		8.7	Metro

Mundaring	A↑11310	Needham	6.9	Partly in Northam Shire	
	C↑11760		4.1		
	C↑14278		91.6		
	C↑30667	Beechina	58.9		
	C↑30681		24.3		
Murray	C↑2707	Carrabungup	0.0	Cancelled Kooljerranup includes ↑36126 in C.F.R. Cancelled Cancelled Joint Vesting - Shire	
	A↑2738	Mealup Point	29.5		
	B↑4990	Austin Bay	1588.3		
	A↑6627	Lake Mealup	37.1		
	A↑16907	Nine Mile Lake	113.0		
	C↑19413		38.6		
	A↑23756	Kooljerrenup	1019.0		
	B↑24036	Austin Bay	0.0		
	C↑24430		2.9		
	A↑24739	McLarty	48.1		
	C↑28087	Austin Bay	0.0		
	C↑33749	Boodalan	1.6		
	A↑39404	Lake McLarty	184.4		
	C↑40476		31.1		
A↑41184		15.9			
Northam	C↑4623		46.0		
	A↑5644	Mortlock	41.4		
	C↑7220	Throssell	17.7		
	C↑14275		1486.1		
	C↑14276		543.7		
	A↑29977	Meenaar	71.8		
	C↑30363	Woottating	233.8		
	A↑31211	Mokine	289.0		
	C↑32400	Clackline	672.2		
	A↑34772	Meenaar	29.5		
A↑39247	Warranine	35.2			
Rockingham	A↑24204		3.2	Metro	
	A↑31893		0.3	Metro	
	A↑31894		0.2	Metro	
Swan	A↑25919	Copley Dale	5.4		
	A↑27620		67.2		Metro
	A↑27621		155.3		Metro
	C↑41938		3210.2		
	A↑42126		5.6		Metro
Serpentine / Jarrahdale	A↑2457		70.7	Metro	
	C↑23012		27.4	Metro	
	A↑25886	Modong	155.9	Metro	
	A↑28167	Serpentine	33.0	Metro	
	C↑32202	Karnet	302.0		
	C↑33287		293.3		
South Perth	A↑33803	Milyu	4.4	Metro	
Stirling	C↑31906		5.3	Metro	

Toodyay	C↑2393	Wattening	40.5	
	A↑3156		38.9	
	C↑19900	Poisen Gully	87.2	
	C↑21429	Rugged Hills	252.0	
	C↑22096	Flat Rock Gully	386.1	
	A↑30191	Moondyne	1991.2	
	C↑30306	Bewmalling	39.2	
	A↑33254	Nanamoolan	9.5	
	A↑33697	Wongamine	298.8	
	A↑35291	Hoddy Well	4.6	
	A↑38924	Morangup	931.6	
Wanneroo	C↑7349	Jandabup	245.7	Metro
	A↑21708		4.0	
	A↑31048		465.4	
Waroona	A↑5098	Marrarup	121.4	
York	A↑21981	Wambyn	215.2	
	C↑24179	Balkuling	11.9	
	A↑30591	St Ronans	118.2	
	A↑31192	Cullen	0.9	
	A↑39149	Wallaby	59.2	
	C↑40642	Hardy	14.7	
		TOTAL:	40253.5	

FREEHOLD NATURE RESERVES
(As at 30 June 1992)

SHIRE	LOCATION	NAME	AREA (HA)	COMMENTS
Gingin	3115	Mogumber	95.0	
	2117	Mogumber	40.5	
		TOTAL	135.5	

**OTHER RESERVES UNDER CALM CONTROL
& UNDER LANDS ACT
(As at 30 June 1992)**

**** Lands under CALM control not considered in this paper are:**

1. State Forest
2. Timber Reserve (25) under CALM Act.
3. Some land held freehold by the Executive Director

SHIRE	NUMBER	PURPOSE	AREA (HA)	VESTING/COMMENTS
Armadale	C↑40094	Office and Depot site	2.0	Executive Director
Boddington	A↑4596	Timber & Park.	64.7	Lands & Forests Comm.
Mandurah	C↑39031	National Park Housing	2.0	NPNCA
Murray	C↑13917	Dwellingup office	1.9	Not Vested
	C↑19276	Forestry purposes	0.5	Not vested
	C↑19551	Forestry purposes	0.7	Not vested
	C↑41160	Foreshore Mgmt.	7.6	NPNCA
Peppermint Grove	A↑17060	Recreation	2.3	NPNCA - Metro
Perth	A↑21054	Disused Grave	4.4	NPNCA - Metro
	C↑25631	Public Park	0.5	NPNCA - Metro
Jarrahdale	C↑8445	Educational purposes	1.0	Executive Director J'dale Study Centre
Rockingham	A↑17070	Rec'n. & camping	12.4	NPNCA - Metro
	C↑37090	Explosives & For.	484.8	Min. Mines and Exec. Director
South Perth	C↑20804	Recreation	0.2	NPNCA
	C↑26916	CALM HQ	18.4	Executive Director
Subiaco	A↑17375	Recreation	18.9	NPNCA - Metro
	A↑40891	Marine Park	3.9	NPNCA - Metro
Toodyay	A↑30193	Timber	5143.0	Executive Director
Wanneroo	C↑6058	For. purposes	1.8	Not vested
	C↑21176	For. " Pine Seed Orchard	11.2	Executive Director
	C↑25401	For. purposes	1.6	Not vested
	C↑29246	CALM HQ	15.2	Executive Director
	C↑30809	Research & Cons.F&F	39.0	Exec. Director - Metro
		TOTAL	5838.0	

**CONSERVATION OF FLORA AND/OR FAUNA RESERVES
NOT VESTED IN CALM
(As at 30 June 1992)**

SHIRE	NUMBER	PURPOSE	AREA (HA)	VESTING
Armadale	C↑5704		205.9	WAWA
Gingin	C↑7504	Water & Cons. F&F	485.0	Min. Water Resources
Mandurah	C↑27810	Conserv'n. F&F	3.3	Mandurah Shire
Mundaring	C↑11140	Conserv'n. F&F	4.0	Not vested
Murray	C↑6268	Timber & Flora	15.6	Not vested
		TOTAL	713.8	

SHIRE	NUMBER	PURPOSE	AREA (HA)	COMMENTS
Mundaring	C↑23537	Burkinshaw	11.3	Not vested
Murray	A↑20215	Murray River Delta Islands	78.5	Vested in Shire
		TOTAL	89.8	

STAFF NUMBERS - SWAN REGION

1992 / 93

DISTRICT	P.S.ACT	FIELD STAFF	N.PARK Marine Park Rangers Maint. Work	AWU	OTHER	TOTAL
Kelmscott	14 1 Casual	4	2	-	- 2 cleaners 2 w'enders	20 (5)
Mundaring	6	8	8	13	4 mechanics 2 cleaners 2 gatek'rs	39 (4)
Jarrahdale	2 2 Casual	10	2 1 P/T	14	- 1 Cleaner 2 gatek'rs.	28 (6)
Dwellingup	6	9	1	19	2 mechanics 1 cleaner 5 fee collectors 1 gardener 1 pilots	37 (8)
Perth	6	15	13	29	2 mechanics 1 Apprentice 2 Ticket sellers 1 cleaner 4 cave guides	66 (7)
	34 3 Casual	46	26 1	75	9 (26)	190 (30)
						= 220

Bold = **Full-time Employment**
Normal = **Part-time / casual employment**

CONSERVATION AND LAND MANAGEMENT WA

PRESCRIBED BURNING - SUMMARY

- SWAN REGION

AREAS (HA)

REGIONS AND DISTRICTS	STATE FORESTS										NATIONAL PARKS			NATURE RESERVES			TOTAL
	Hardwoods					Softwoods					AERIAL	HAND	BUFFER STRIPS KM	AERIAL	HAND	BUFFER STRIPS KM	
	AERIAL	HAND	SLASH & REGEN	TOTAL	UNDER PINES	CLEARING & OTHER											
1985-86	39525	9638	967	50130	5402	432	788	211	-	-	-	-	-	-	-	-	56963
1986-87	50222	6577	380	57179	5200	568	-	210	8	-	1200	-	-	-	-	-	64365
1987-88	42529	9479	620	52628	4266	40	-	8	-	-	-	275	10	-	-	-	57227
1988-89	46217	4980	470	51667	4663	65	-	606	10	-	-	-	-	-	-	-	57011
1989-90	33346	4551	73	37970	5274	45	-	833	-	-	-	97	-	-	-	-	44219
1990-91	50001	5228	270	55499	2537	20	-	159	-	-	-	138	-	-	-	-	58353
1991-92	37989	4691	2520	45200	2863	34	4190	539	4640	-	-	105	2.2	-	-	-	57573

LANDS OTHER THAN CLM
 216 ha S.P.C., 444ha WAWA
 312 ha V.C.L.; 175ha WAWA;
 452 ha BFB
 639ha O.C.L.; 600ha P.P.
 20ha O.C.L.
 1334ha WAWA; 2 V.C.L.
 440ha WAWA; 650ha P.P.
 88.7ha WAWA; 2ha DOLA;
 150ha P.P.

